

INTERNATIONAL TELECOMMUNICATION UNION

Radiocommunication Bureau

(Direct Fax No. +41 22 730 57 85)



Circular Letter
CR/157

23 April 2001

To Administrations of Member States of the ITU

Subject: Changes to the Appendices S30/S30A Regions 1 and 3 Plans and Lists of additional uses due to a bug recently identified in ITU Software

References: Article 11 to Appendix S30;
Article 9A to Appendix S30A;
Resolution 542 (WRC-2000);
Circular Letter CR/146 of 26 July 2000
Circular Letter CR/153 of 15 December 2000
Radio Regulations Board Document RRB2001/255-E of 29 January 2001

To the Director General

Dear Madam or Sir,

1. WRC-2000 adopted the BSS Regions 1 and 3 downlink and feeder-link Plans and Lists of additional uses, as contained in Appendices S30 and S30A and Resolution 542 (WRC-2000), based on the successful results of the re-planning studies performed by the planning team of the Radiocommunication Bureau during the Conference. The main characteristics and the Reference Situation (i.e. the Equivalent Protection Margin (EPM)) of each assignment adopted by WRC-2000 are contained in the Tables of Articles 11 and 9A of Appendices S30 and S30A respectively, as well as in the Annexes to Resolution 542 (WRC-2000).

2. The characteristics mentioned in paragraph 1 above were defined for each assignment by the BR planning team in accordance with the assumptions made by the Inter-conference Representative Group (IRG) and adopted by the Conference, after having been slightly amended to take into account new proposals/concerns expressed by some administrations. These characteristics were further verified during the interference calculations conducted by the BR planning team to ensure that the results of the compatibility analysis of the WRC-2000 Plans and Lists of additional uses met the WRC-2000 planning principles and criteria. In order to perform this compatibility analysis, the BR planning team used several ITU standard software applications developed by the Bureau.

3. Recently, a bug in one part of the ITU software applications mentioned in paragraph 2 above, was identified by the Bureau. This bug is related to the antenna cross-polar gain value of the receiving space station of any composite beam in the feeder-link Plans. In fact, the same bug was identified in August 1999 and corrected at that time in order to conduct the re-planning feasibility studies for the fourth meeting of the

./.

Group of Technical Experts (GTE-4, Geneva, 27 September – 1 October 1999). Unfortunately, the bug inadvertently remained in the subsequent versions of the software. This software was used subsequently to perform the re-planning feasibility studies before WRC-2000, as well as the planning studies at the Conference itself.

4. The bug has been fixed. Its impact on the Reference Situations of the WRC-2000 Plans and Lists of additional uses has also been examined by the Bureau. Although this bug has an impact on the Reference Situation (EPM) for most of the assignments using a composite beam in the 14 GHz and 17 GHz feeder-link Plans, only five beams of three administrations have new EPM values which are no longer in accordance with the WRC-2000 principles and criteria used in adopting the Plans.

5. The Bureau investigated the matter and has identified solutions towards the resolution of the difficulties mentioned in paragraph 4 above. These provisional solutions require changes to the characteristics of some assignments in the Plans adopted at WRC-2000, as well as the establishment of new Reference Situations for the WRC-2000 Plans and Lists of additional uses.

6. The Bureau brought the matter to the attention of the 22nd meeting of the Radio Regulations Board (RRB). The Board took note of the problem , the effects thereof and the measures initiated by the Bureau. The Board will re-consider the matter at its next (23rd) meeting having regard to the results of BR consultation with Administrations.

7. In accordance with the above-mentioned RRB decision, the Bureau has consulted with concerned Administrations and all have concurred with the provisional changes mentioned in Paragraph 5 above. In summary, they are:

- Group the beams F____200 and F____300 together in the 17 GHz feeder-link Plan for Regions 1 & 3.
- Change orbital position of beam GMB30400 from 37°W to 37.2°W in the downlink and 17 GHz feeder-link Plans for Regions 1 & 3.
- Change orbital position of beams INDA_100 and INDB_100 from 56°E to 55.8°E in the downlink Plan for Regions 1 & 3.
- Change the channel arrangement and orbital position for the INDA_100 and INDB_100 beams in the 17 GHz feeder-link Plan for Regions 1 & 3. This involves replacing beams INDA_100 and INDB_100 at 56°E with the grouped beams INDA_101 and INDA_102 at 55.8°E, and grouped beams INDB_101 and INDB_102 at 55.8°E respectively.
- Add grouped beams INDA_101 and INDA_102 with 6 channels each at 55.8°E in the 14 GHz feeder-link Plan for Regions 1 & 3.

Details of the provisional amendments to the beam characteristics are provided in Attachment 1.

8. As a result of these changes, a new provisional¹ reference situation for the Regions 1 & 3 Plans and Lists of additional uses has been re-calculated using the latest versions of MSPACEg and GIMS software applications (versions 1.961 and 1.6 respectively). This provisionally replaces the reference situation mentioned in Circular Letter CR/153 of 15 December 2000, which was an update of the reference situation published in Circular Letter CR/146 of 26 July 2000 under Resolves 1 of Resolution 533(Rev. WRC-2000). The complete provisional¹ reference situation for the Regions 1 & 3 downlink Plan, feeder-link Plans, downlink List of additional uses, and feeder-link Lists of additional uses is provided in Attachments 2, 3, 4 and 5 respectively. (The general description of these Attachments is contained in this Circular Letter and the full data is included on the IFIC CD-ROM No. 2443 of 1 May 2001). Note that this reference situation is provisional subject to RRB consideration at its next (23rd) meeting. RRB decisions on this issue will be subsequently communicated to Administrations.

¹ Subject to RRB consideration at its next (23rd) meeting.

9. Please note also that the provisional¹ reference situation contained in this Circular Letter, as well as the reference situation of the Lists as they evolve as result of addition and/or deletion of satellite networks, will be posted on the ITU's website at:

http://www.itu.int/bss/MSPACEg_files.html

10. The Radiocommunication Bureau trusts that the above-mentioned information will be of use to your Administration and is at your disposal to clarify any concerns that you may have.

Yours faithfully,

Robert W. Jones
Director,
Radiocommunication Bureau

Attachments: 5

Distribution:

- Administrations of Member States of the ITU
- Members of the Radio Regulations Board

¹ Subject to RRB consideration at its next (23rd) meeting

Attachment 1

Provisional Amendments to Beam Characteristics

1.1 French Beams

1.1.1 17 GHz Feeder-link Beams:

Admin. Symbol	Beam Identification	Orbital Position (°E)	Boresight		Space Antenna Characteristics			Space Antenna Type	Shaped Beam	Space Antenna Gain (dBi)		Earth Antenna		Polarization		e.i.r.p. (dBW)	Power Control	Emission Designation	Satellite Identification	Group Code	Status	Remarks
			Long. (°E)	Lat. (°N)	Major Axis (°)	Minor Axis (°)	Ori-entation (°)			Co-polar	Cross-polar	Type	Gain (dBi)	Type	Angle (°)							
F	F_200	140.00	174.50	-17.30				CB_RSS_F_B		45.80		MODTES	57.00	CL		84.0		27M0G7W		7F	P	
F	F_300	140.00	174.65	-17.65				CB_RSS_F_C		47.97		MODTES	57.00	CR		84.0		27M0G7W		7F	P	

1.2 Gambian Beams

1.2.1 17 GHz Feeder-link Beam:

Admin. Symbol	Beam Identification	Orbital Position (°E)	Boresight		Space Antenna Characteristics			Space Antenna Type	Shaped Beam	Space Antenna Gain (dBi)		Earth Antenna		Polarization		e.i.r.p. (dBW)	Power Control	Emission Designation	Satellite Identification	Group Code	Status	Remarks
			Long. (°E)	Lat. (°N)	Major Axis (°)	Minor Axis (°)	Ori-entation (°)			Co-polar	Cross-polar	Type	Gain (dBi)	Type	Angle (°)							
GMB	GMB30200	-37.20	-15.10	13.40	0.79	0.60	4.00	MODRSS		47.69		MODTES	57.00	CL		83.0		27M0G7W			P	

1.2.2 Downlink Beam:

Admin. Symbol	Beam Identification	Orbital Position (°E)	Boresight		Space Antenna Characteristics			Space Antenna Type	Shaped Beam	Space Antenna Gain (dBi)		Earth Antenna		Polarization		e.i.r.p. (dBW)	Emission Designation	Satellite Identification	Group Code	Status	Remarks	
			Long. (°E)	Lat. (°N)	Major axis(°)	Minor axis(°)	Ori-entation(°)			Co-polar	Cross-polar	Type	Gain (dBi)	Type	Angle (°)							
GMB	GMB30200	-37.20	-15.10	13.40	0.79	0.60	4.00	R13TSS		47.69		MODRES	35.50	CL		58.3	27M0G7W			P		

1.3 Indian Beams

1.3.1 14 GHz Feeder-link Beams:

Admin. Symbol	Beam Identification	Orbital Position (°E)	Boresight		Space Antenna Characteristics			Space Antenna Type	Shaped Beam	Space Antenna Gain (dBi)		Earth Antenna		Polarization		e.i.r.p. (dBW)	Power Control	Emission Designation	Satellite Identification	Group Code	Status	Remarks
			Long. (°E)	Lat. (°N)	Major Axis (°)	Minor Axis (°)	Orientation (°)			Co-polar	Cross-polar	Type	Gain (dBi)	Type	Angle (°)							
IND	INDA_101	55.80	76.16	14.72				CB_RSS_INDA		45.66		MODTES	57.00	CR		82.0		27M0G7W		4U	P	
IND	INDA_102	55.80	76.16	14.72				CB_RSS_INDA		45.66		MODTES	57.00	CL		82.0		27M0G7W		4U	P	

1.3.2 17 GHz Feeder-link Beams:

Admin. Symbol	Beam Identification	Orbital Position (°E)	Boresight		Space Antenna Characteristics			Space Antenna Type	Shaped Beam	Space Antenna Gain (dBi)		Earth Antenna		Polarization		e.i.r.p. (dBW)	Power Control	Emission Designation	Satellite Identification	Group Code	Status	Remarks
			Long. (°E)	Lat. (°N)	Major Axis (°)	Minor Axis (°)	Orientation (°)			Co-polar	Cross-polar	Type	Gain (dBi)	Type	Angle (°)							
IND	INDA_101	55.80	76.16	14.72				CB_RSS_INDA		45.66		MODTES	57.00	CR		84.0		27M0G7W		7G	P	
IND	INDA_102	55.80	76.16	14.72				CB_RSS_INDA		45.66		MODTES	57.00	CL		84.0		27M0G7W		7G	P	
IND	INDB_101	55.80	83.67	23.73				CB_RSS_INDB		43.13		MODTES	57.00	CR		84.0		27M0G7W		7H	P	
IND	INDB_102	55.80	83.67	23.73				CB_RSS_INDB		43.13		MODTES	57.00	CL		84.0		27M0G7W		7H	P	

1.3.3 Downlink Beams:

Admin. Symbol	Beam Identification	Orbital Position (°E)	Boresight		Space Antenna Characteristics			Space Antenna Type	Shaped Beam	Space Antenna Gain (dBi)		Earth Antenna		Polarization		e.i.r.p. (dBW)	Emission Designation	Satellite Identification	Group Code	Status	Remarks
			Long (°E)	Lat (°N)	Major axis(°)	Minor axis(°)	Ori-entation(°)			Co-polar	Cross-polar	Type	Gain (dBi)	Type	Angle (°)						
IND	INDA_100	55.80	76.16	14.72				CB_TSS_INDA		45.66		MODRES	35.50	CR		58.8	27M0G7W			P	
IND	INDB_100	55.80	83.43	24.22				CB_TSS_INDB		43.15		MODRES	35.50	CL		58.9	27M0G7W			P	

ATTACHMENT 2

Provisional Reference Situation for the Regions 1 and 3 Downlink Plan

Notes to Table 1:

1. Table 1 provides the complete provisional reference situation Equivalent Protection Margins (EPMs) of the Appendix S30 (WRC-2000) Regions 1 and 3 Downlink Plan (i.e. for all test-points).
2. Characteristics of each of the beams are given in the table contained in Article 11 of Appendix S30 (WRC-2000), as provisionally amended in Attachment 1 to this document.

Table 1 to Attachment 2

Equivalent Protection Margin (EPM) of Assignments in the Appendix S30 Regions 1 and 3 Plan (sorted by orbital position)

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																								
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
-24.80	CTI	CTI23700	6.40	-8.70	4.63	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16																							
-24.80	CTI	CTI23700	8.10	-2.50	3.39	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87																							
-24.80	CTI	CTI23700	9.80	-3.50	3.57	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02																							
-24.80	CTI	CTI23700	10.10	-8.00	3.68	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15																							
-24.80	CTI	CTI23700	10.70	-6.30	3.82	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30																							
-24.80	LBY	LBY_100	19.50	24.00	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	6.34																						
-24.80	LBY	LBY_100	20.00	25.00	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	6.30																						
-24.80	LBY	LBY_100	22.50	14.00	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	6.70																						
-24.80	LBY	LBY_100	22.50	18.00	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	6.75																						
-24.80	LBY	LBY_100	24.50	10.00	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	6.12																						
-24.80	LBY	LBY_100	26.50	9.20	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	6.07																						
-24.80	LBY	LBY_100	30.00	9.20	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	4.35																							
-24.80	LBY	LBY_100	32.00	25.20	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	6.45																						
-24.80	LBY	LBY_100	32.50	20.00	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	6.37																						
-24.80	LBY	LBY_100	33.00	22.00	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	6.43																						
-24.80	LBY	LBY_100	33.50	11.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.65																							
-19.20	BEN	BEN23300	6.20	2.20	4.68	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92																							
-19.20	BEN	BEN23300	7.10	2.00	5.30	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61																							
-19.20	BEN	BEN23300	9.20	2.30	6.07	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47																							
-19.20	BEN	BEN23300	10.40	1.00	3.19	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71																							
-19.20	BEN	BEN23300	10.50	3.40	3.73	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15																							
-19.20	BEN	BEN23300	11.50	3.20	3.12	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61																							
-19.20	COD	COD_100	-13.50	29.80	6.05	6.06	6.05	6.06	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	5.85																							
-19.20	COD	COD_100	-11.10	22.10	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	6.89																						
-19.20	COD	COD_100	-8.20	30.70	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.92																						
-19.20	COD	COD_100	-5.60	12.00	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	6.16																						
-19.20	COD	COD_100	-4.20	30.00	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	7.10																						
-19.20	COD	COD_100	-4.00	24.00	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44	9.31																						
-19.20	COD	COD_100	-3.50	21.50	8.78	8.79	8.78	8.78	8.79	8.79	8.79	8.79	8.79	8.79	8.79	8.79	8.79	8.79	8.79	8.79	8.79	8.79	9.75																						
-19.20	COD	COD_100	-2.00	16.00	5.41	5.42	5.41	5.42	5.41	5.42	5.41	5.42	5.41	5.42	5.41	5.42	5.41	5.42	5.41	5.42	5.41	6.60																							
-19.20	COD	COD_100	-1.00	16.30	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	6.93																						
-19.20	COD	COD_100	2.20	31.50	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	8.18																						
-19.20	COD	COD_100	3.00	27.50	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	8.71	9.69																						
-19.20	COD	COD_100	5.00	19.50	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	6.08	7.56																						
-19.20	MLI	MLI_100	11.00	-8.30	8.03	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38																							
-19.20	MLI	MLI_100	13.40	-4.00	5.79	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62																							
-19.20	MLI	MLI_100</																																											

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point Latitude (°N)	Longitude (°E)	EPM (dB) / Channel Number																																															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40								
-13.00	CME	CME30000	1.40	16.20																						0.44	0.44	0.44	0.47	0.44	0.47	0.44	0.47	0.47	0.44	0.47	0.44	0.52														
-13.00	CME	CME30000	2.20	8.80																						2.23	2.23	2.23	2.27	2.23	2.27	2.23	2.27	2.23	2.27	2.23	2.27	2.47														
-13.00	CME	CME30000	4.80	8.50																						1.92	1.92	1.92	1.96	1.92	1.96	1.92	1.96	1.92	1.96	1.92	1.96	2.01														
-13.00	CME	CME30000	7.70	15.60																						1.12	1.12	1.12	1.15	1.12	1.15	1.12	1.15	1.12	1.15	1.12	1.15	1.23														
-13.00	CME	CME30000	10.00	15.60																						1.20	1.20	1.20	1.24	1.20	1.24	1.20	1.24	1.20	1.24	1.20	1.24	1.36														
-13.00	CME	CME30000	13.20	14.20																						1.24	1.24	1.24	1.31	1.24	1.31	1.24	1.31	1.24	1.31	1.24	1.31	1.44														
-12.80	CZE	CZE14401	42.39	16.26	4.44																					4.41	4.12	4.12	0.79								0.92															
-12.80	CZE	CZE14401	42.39	18.54	4.57																					4.65	4.36	4.36	0.89								1.02															
-12.80	CZE	CZE14401	45.50	13.51	3.56																					2.75	2.59	2.59	0.54								0.64															
-12.80	CZE	CZE14401	46.20	21.00	5.51																					5.49	5.20	5.20	2.07								2.21															
-12.80	CZE	CZE14401	48.00	22.90	4.48																					4.45	4.16	4.16	1.18								1.33															
-12.80	CZE	CZE14401	48.03	17.10	5.11																					4.35	4.16	4.16	2.05								2.17															
-12.80	CZE	CZE14401	49.05	22.50	4.11																					3.88	3.62	3.62	0.96								1.10															
-12.80	CZE	CZE14401	49.52	18.84	4.27																					3.52	3.33	3.33	1.29								1.41															
-12.80	CZE	CZE14401	50.32	12.11	1.93																					0.75	0.63	0.63	-0.85								-0.76															
-12.80	CZE	CZE14401	51.05	14.32	2.63																					1.50	1.36	1.36	-0.16								-0.06															
-12.80	CZE	CZE14402	42.39	16.26																						2.91											-0.28						-0.28									
-12.80	CZE	CZE14402	42.39	18.54																						3.22											-0.94						-0.94									
-12.80	CZE	CZE14402	45.50	13.51																						1.74											0.57						0.57									
-12.80	CZE	CZE14402	46.20	21.00																						3.91											0.11						0.11									
-12.80	CZE	CZE14402	48.00	22.90																						2.88											-0.39						-0.39									
-12.80	CZE	CZE14402	48.03	17.10																						3.20											1.55						1.55									
-12.80	CZE	CZE14402	49.05	22.50																						2.41											-0.22						-0.22									
-12.80	CZE	CZE14402	49.52	18.84																						2.36											0.74						0.74									
-12.80	CZE	CZE14402	50.32	12.11																						0.06											-0.85						-0.85									
-12.80	CZE	CZE14402	51.05	14.32																						0.71											-0.26						-0.26									
-12.80	CZE	CZE14403	42.39	16.26	2.93																																															
-12.80	CZE	CZE14403	42.39	18.54	3.23																																															
-12.80	CZE	CZE14403	45.50	13.51	1.74																																															
-12.80	CZE	CZE14403	46.20	21.00	3.91																																															
-12.80	CZE	CZE14403	48.00	22.90	2.88																																															
-12.80	CZE	CZE14403	48.03	17.10	3.19																																															
-12.80	CZE	CZE14403	49.05	22.50	2.41																																															
-12.80	CZE	CZE14403	49.52	18.84	2.36																																															
-12.80	CZE	CZE14403	50.32	12.11	0.06																																															
-12.80	CZE	CZE14403	51.05	14.32	0.71																																															
-12.80	HNG	HNG10601	42.39	16.26		4.61																																											1.42			
-12.80	HNG	HNG10601	42.39	18.54		4.85																																											1.52			
-12.80	HNG	HNG10601	45.50	13.51		3.08																																											1.14			
-12.80	HNG	HNG10601	46.20	21.00		5.68																																											2.71			
-12.80	HNG	HNG10601	48.00	22.90		4.65																																											1.82			
-12.80	HNG	HNG10601	48.03	17.10		4.65																																											2.67			
-12.80	HNG	HNG10601	49.05	22.50		4.10																																											1.59			
-12.80	HNG	HNG10601	49.52	18.84		3.82																																											1.91			
-12.80	HNG	HNG10601	50.32	12.11		1.12																																											-0.26			
-12.80	HNG	HNG10601	51.05	14.32		1.85																																											0.44			
-12.80	HNG	HNG10602	42.39</td																																																	

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																									
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40		
-12.80	HNG	HNG10602	45.50	13.51						2.24																													1.07				1.07			
-12.80	HNG	HNG10602	46.20	21.00						4.41																													0.61			0.61				
-12.80	HNG	HNG10602	48.00	22.90						3.38																													0.11			0.11				
-12.80	HNG	HNG10602	48.03	17.10						3.69																													2.05			2.05				
-12.80	HNG	HNG10602	49.05	22.50						2.91																													0.28			0.28				
-12.80	HNG	HNG10602	49.52	18.84						2.86																													1.25			1.25				
-12.80	HNG	HNG10602	50.32	12.11						0.56																													-0.35			-0.35				
-12.80	HNG	HNG10602	51.05	14.32						1.21																													0.24			0.24				
-12.80	HNG	HNG10603	42.39	16.26	3.43																																			0.22			0.22			
-12.80	HNG	HNG10603	42.39	18.54	3.73																																			-0.44			-0.44			
-12.80	HNG	HNG10603	45.50	13.51	2.24																																		1.07			1.07				
-12.80	HNG	HNG10603	46.20	21.00	4.41																																		0.61			0.61				
-12.80	HNG	HNG10603	48.00	22.90	3.38																																		0.11			0.11				
-12.80	HNG	HNG10603	48.03	17.10	3.69																																		2.05			2.05				
-12.80	HNG	HNG10603	49.05	22.50	2.91																																		0.28			0.28				
-12.80	HNG	HNG10603	49.52	18.84	2.86																																		1.25			1.25				
-12.80	HNG	HNG10603	50.32	12.11	0.56																																		-0.35			-0.35				
-12.80	HNG	HNG10603	51.05	14.32	1.21																																		0.24			0.24				
-12.80	HRV	HRV14801	42.39	16.26						4.12																											3.13			0.92		0.92				
-12.80	HRV	HRV14801	42.39	18.54						4.36																											3.21			1.02		1.02				
-12.80	HRV	HRV14801	45.50	13.51						2.59																											2.11			0.64		0.64				
-12.80	HRV	HRV14801	46.20	21.00						5.20																											4.35			2.21		2.21				
-12.80	HRV	HRV14801	48.00	22.90						4.16																											3.45			1.33		1.33				
-12.80	HRV	HRV14801	48.03	17.10						4.16																											3.74			2.17		2.17				
-12.80	HRV	HRV14801	49.05	22.50						3.62																											3.08			1.10		1.10				
-12.80	HRV	HRV14801	49.52	18.84						3.33																											2.98			1.41		1.41				
-12.80	HRV	HRV14801	50.32	12.11						0.63																											0.75			-0.76		-0.76				
-12.80	HRV	HRV14801	51.05	14.32						1.36																											1.50			1.10		-0.06				
-12.80	HRV	HRV14802	42.39	16.26							2.91																														0.28			0.67		
-12.80	HRV	HRV14802	42.39	18.54							3.22																														0.94			-0.20		
-12.80	HRV	HRV14802	45.50	13.51							1.74																													0.57			2.13			
-12.80	HRV	HRV14802	46.20	21.00							3.91																													0.11			0.94			
-12.80	HRV	HRV14802	48.00	22.90							2.88																													0.39			0.57			
-12.80	HRV	HRV14802	48.03	17.10							3.20																														1.55			3.00		
-12.80	HRV	HRV14802	49.05	22.50							2.41																													0.22			0.90			
-12.80	HRV	HRV14802	49.52	18.84							2.36																												0.74			2.22				
-12.80	HRV	HRV14802	50.32	12.11							0.06																													0.85			0.79			
-12.80	HRV	HRV14802	51.05	14.32							0.71																													0.26			1.42			
-12.80	HRV	HRV14803	42.39	16.26	2.93																																				-0.28			-0.28		
-12.80	HRV	HRV14803	42.39	18.54	3.23																																			-0.94			-0.94			
-12.80	HRV	HRV14803	45.50	13.51	1.74																																			0.57			0.57			
-12.80	HRV	HRV14803	46.20	21.00	3.91																																			0.11			0.11			
-12.80	HRV	HRV14803	48.00	22.90	2.88																																			-0.39			-0.39			
-12.80	HRV	HRV14803	48.03	17.10	3.19																																			1.55			1.55			
-12.80	HRV	HRV14803	49.05	22.50	2.41																																			-0.22			-0.22			
-12.80	HRV	HRV14803	49.52	18.84	2.36																																			0.75			0.74			
-12.80	HRV	HRV14803	50.32	12.11	0.06																																			-0.85			-0.85			
-12.80	HRV	HRV14803	51.05	14.32	0.71																																			-0.26			-0.26			

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																							
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
-7.00	SDN	SDN_100	4.60	36.00																				8.07	7.96	7.97	7.96	7.97	7.96	7.97	7.96	7.97	7.96	7.97	7.96	7.97	7.96	7.97	7.96	7.97	7.96	7.97	7.96	
-7.00	SDN	SDN_100	8.50	34.00																				8.65	8.83	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	
-7.00	SDN	SDN_100	8.70	23.50																				9.21	8.88	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	8.89	
-7.00	SDN	SDN_100	10.00	30.00																				10.15	10.37	10.39	10.38	10.39	10.38	10.39	10.38	10.39	10.38	10.39	10.38	10.39	10.38	10.39	10.38	10.39	10.38	10.39	10.38	
-7.00	SDN	SDN_100	10.70	23.00																				8.80	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	
-7.00	SDN	SDN_100	11.00	23.00																				8.70	8.37	8.38	8.37	8.38	8.37	8.38	8.37	8.38	8.37	8.38	8.37	8.38	8.37	8.38	8.37	8.38	8.37	8.38	8.37	
-7.00	SDN	SDN_100	13.00	22.00																				8.34	8.08	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.09	
-7.00	SDN	SDN_100	15.60	23.00																				8.13	8.58	8.59	8.58	8.59	8.58	8.59	8.58	8.59	8.58	8.59	8.58	8.59	8.58	8.59	8.58	8.59	8.58	8.59	8.58	
-7.00	SDN	SDN_100	15.80	24.00																				8.49	9.20	9.21	9.20	9.21	9.20	9.21	9.20	9.21	9.20	9.21	9.20	9.21	9.20	9.21	9.20	9.21	9.20	9.21	9.20	
-7.00	SDN	SDN_100	16.00	32.00																				9.19	10.48	10.49	10.48	10.49	10.48	10.49	10.48	10.49	10.48	10.49	10.48	10.49	10.48	10.49	10.48	10.49	10.48	10.49	10.48	
-7.00	SDN	SDN_100	16.00	36.80																				7.80	8.78	8.79	8.78	8.79	8.78	8.79	8.78	8.79	8.78	8.79	8.78	8.79	8.78	8.79	8.78	8.79	8.78	8.79	8.78	
-7.00	SDN	SDN_100	18.00	38.50																				8.18	9.45	9.46	9.45	9.46	9.45	9.46	9.45	9.46	9.45	9.46	9.45	9.46	9.45	9.46	9.45	9.46	9.45	9.46	9.45	
-7.00	SDN	SDN_100	22.00	25.00																				5.42	7.99	8.00	7.99	8.00	7.99	8.00	7.99	8.00	7.99	8.00	7.99	8.00	7.99	8.00	7.99	8.00	7.99	8.00	7.99	
-7.00	SDN	SDN_100	23.00	35.50																				5.62	8.44	8.46	8.45	8.46	8.45	8.46	8.45	8.46	8.45	8.46	8.45	8.46	8.45	8.46	8.45	8.46	8.45	8.46	8.45	
-7.00	STP	STP24100	0.40	6.80	6.37	6.05	6.04	6.05	6.04	6.05	6.04	6.05	6.04	6.05	6.04	6.05	6.04	6.05	6.04	6.05	6.04	5.04																						
-7.00	STP	STP24100	0.80	7.00	6.95	6.58	6.57	6.58	6.57	6.58	6.57	6.58	6.57	6.58	6.57	6.58	6.57	6.58	6.57	6.58	6.57	5.67																						
-7.00	STP	STP24100	1.70	7.40	6.13	5.60	5.59	5.60	5.59	5.60	5.59	5.60	5.59	5.60	5.59	5.60	5.59	5.60	5.59	5.60	5.59	4.85																						
-7.00	STP	STP24100	2.00	5.00	8.75	7.88	7.87	7.88	7.87	7.89	7.87	7.89	7.87	7.89	7.87	7.89	7.87	7.89	7.87	7.89	7.87	5.71																						
-7.00	YUG	YUG14800	41.80	20.50																				0.54	1.13	1.14	1.33	1.14	1.33	1.14	1.33	1.14	1.33	1.14	1.33	1.14	1.33	1.14	1.33	1.14	1.33	1.14	1.33	1.14
-7.00	YUG	YUG14800	41.90	19.30																				0.28	0.51	0.52	0.72	0.52	0.72	0.52	0.72	0.52	0.72	0.52	0.72	0.52	0.72	0.52	0.72	0.52	0.72	0.52	0.72	0.52
-7.00	YUG	YUG14800	42.33	22.43																				1.00	1.16	1.18	1.34	1.18	1.34	1.18	1.34	1.18	1.34	1.18	1.34	1.18	1.34	1.18	1.34	1.18	1.34	1.18	1.34	1.18
-7.00	YUG	YUG14800	42.40	18.50																				0.67	0.18	0.20	0.42	0.20	0.42	0.20	0.42	0.20	0.42	0.20	0.42	0.20	0.42	0.20	0.42	0.20	0.42	0.20	0.42	0.20
-7.00	YUG	YUG14800	44.20	22.70																				1.28	1.41	1.43	1.64	1.43	1.64	1.43	1.64	1.43	1.64	1.43	1.64	1.43	1.64	1.43	1.64	1.43	1.64	1.43	1.64	1.43
-7.00	YUG	YUG14800	44.85	18.99																				0.30	0.69	0.96	0.95	0.96	0.95	0.96	0.95	0.96	0.95	0.96	0.95	0.96	0.95	0.96	0.95	0.96	0.95	0.96	0.95	
-7.00	YUG	YUG14800	45.90	18.80																				1.20	1.12	0.58	0.87	0.58	0.87	0.58	0.87	0.58	0.87	0.58	0.87	0.58	0.87	0.58	0.87	0.58	0.87	0.58	0.87	0.58
-7.00	YUG	YUG14800	46.13	20.22																				0.12	0.08	0.30	0.34	0.30	0.34	0.30	0.34	0.30	0.34	0.30	0.34	0.30	0.34	0.30	0.34	0.30	0.34	0.30	0.34	0.30
-4.00	SR	ISR11000	29.50	34.80																				3.05	3.02	3.11	3.02	3.11	3.02	3.11	3.02	3.11	3.02	3.11	3.02	3.11	3.02	3.11	3.02	3.11	3.02	3.11	3.02	
-4.00	SR	ISR11000	31.20	34.30																				8.44	8.34	8.55	8.34	8.55	8.34	8.55	8.34	8.55	8.34	8.55	8.34	8.55	8.34	8.55	8.34	8.55	8.34	8.55	8.34	
-4.00	SR	ISR11000	31.30	35.30																				8.76	8.66	8.88	8.66	8.88	8.66	8.88	8.66	8.88	8.66	8.88	8.66	8.88	8.66	8.88	8.66	8.88	8.66	8.88	8.66	
-4.00	SR	ISR11000	32.40	35.50																				9.88	9.72	10.07	9.72	10.07	9.72	10.07	9.72	10.07	9.72	10.07	9.72	10.07	9.72	10.07	9.72	10.07	9.72	10.07	9.72	
-4.00	SR	ISR11000	33.20	35.20																				9.47	9.24	9.73	9.24	9.73	9.24	9.73	9.24	9.73	9.24	9.73	9.24	9.73	9.24	9.73	9.24	9.73	9.24	9.73	9.24	
-1.20	BUL	BUL02000	41.20	25.30																				1.94	1.22	2.45	1.22	2.45	1.22	2.44	1.65	2.44	1.65	2.44	1.65	2.44	1.65	2.44	1.65	2.44	1.65	2.44	1.65	
-1.20	BUL	BUL02000	41.30	23.00																				1.04	0.45	1.64	0.45	1.64	0.45	1.63	0.87	1.63	0.87	1.63	0.87	1.63	0.87	1.63	0.87	1.63	0.87	1.63	0.87	
-1.20	BUL	BUL02000	42.00	28.10																				1.72	0.98	2.26	0.98	2.26	0.98	2.25	1.43	2.25	1.43	2.25	1.43	2.25	1.43	2.25	1.43	2.25	1.43	2.25	1.43	
-1.20	BUL	BUL02000	42.30	22.40																				1.77	1.34	2.51	1.34	2.51	1.35	2.47	1.45	2.47	1.45	2.47	1.45	2.47	1.45	2.47	1.45	2.47	1.45	2.47	1.45	
-1.20	BUL	BUL02000	43.80	28.70			</td																																					

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																										
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
17.00	UGA	UGA05100	4.30	34.00																			8.31	8.08	8.06	8.08	8.06	8.08	8.06	8.08	8.06	8.08	8.06	8.08	8.06	8.08	8.06	8.08	8.06	8.08	8.06	8.08					
17.20	OMA	OMA12300	17.00	53.00																				2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.94				
17.20	OMA	OMA12300	19.00	52.00																				1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.77				
17.20	OMA	OMA12300	19.00	58.00																				3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	2.61				
17.20	OMA	OMA12300	22.50	55.10																				4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	2.51				
17.20	OMA	OMA12300	22.50	60.00																				3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	1.05				
17.20	OMA	OMA12300	26.50	56.00																				3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.23	0.85				
20.00	QAT	QAT24700	24.70	50.80	6.65	6.65	6.64	6.64	6.63	6.63	6.62	6.62	6.62	6.62	6.98																																
20.00	QAT	QAT24700	24.80	52.30	5.88	5.88	5.87	5.87	5.86	5.85	5.85	5.84	5.84	5.84	5.84	6.20																															
20.00	QAT	QAT24700	25.30	50.70	6.80	6.79	6.78	6.78	6.77	6.77	6.76	6.76	6.76	6.76	7.11																																
20.00	QAT	QAT24700	26.20	51.10	6.05	6.05	6.04	6.04	6.03	6.02	6.02	6.01	6.01	6.01	6.34																																
22.80	ARM	ARM06400	38.88	46.52																				0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	2.70				
22.80	ARM	ARM06400	39.71	44.79																				3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	5.42				
22.80	ARM	ARM06400	40.11	43.68																			2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	4.72					
22.80	ARM	ARM06400	40.24	45.92																			2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	5.29					
22.80	ARM	ARM06400	41.10	43.50																			1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	4.16					
22.80	ARM	ARM06400	41.20	44.95																			2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	5.15					
22.80	ERI	ERI09200	12.50	42.40																			4.20	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.91					
22.80	ERI	ERI09200	12.72	43.11																			2.79	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.54					
22.80	ERI	ERI09200	14.45	36.50																			4.04	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.56					
22.80	ERI	ERI09200	14.45	39.80																			6.50	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.02	7.02					
22.80	ERI	ERI09200	16.98	37.00																			3.27	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84					
22.80	ERI	ERI09200	17.94	38.54																			2.32	2.82	2.81	2.82	2.82	2.81	2.81	2.82	2.81	2.81	2.81	2.81	2.81	2.81	2.81	2.81	2.81	2.81	2.81	2.81					
22.80	FIN	FIN10300	60.00	19.20																			-0.54	1.24	1.92	2.00	1.82	2.11	1.71	2.22	1.62	4.88															
22.80	FIN	FIN10300	60.00	24.90																			1.42	3.77	4.63	4.66	4.57	4.72	4.52	4.78	4.46	7.61															
22.80	FIN	FIN10300	62.90	31.50																			1.77	2.45	2.66	2.66	2.65	2.66	2.65	2.67	2.64	5.39															
22.80	FIN	FIN10300	66.00	24.00																			5.07	6.44	6.92	6.96	6.86	7.02	6.80	7.08	6.75	9.86															
22.80	FIN	FIN10300	69.10	20.70																			5.03	5.92	6.23	6.28	6.17	6.34	6.10	6.41	6.04	9.13															
22.80	FIN	FIN10300	69.50	29.30																			4.73	4.80	4.83	4.83	4.81	4.85	4.80	4.86	4.79	7.55															
22.80	FIN	FIN10400	55.00	15.00																																											
22.80	FIN	FIN10400	56.00	8.00																																											
22.80	FIN	FIN10400	59.20	4.70																																											
22.80	FIN	FIN10400	60.00	24.90																																											
22.80	FIN	FIN10400	67.40	11.60																																											
22.80	FIN	FIN10400	71.20	25.70																																											
22.80	MKD	MKD14800	40.91	20.97																			4.39	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.15					
22.80	MKD	MKD14800	41.12	20.62																			3.85	3.65	3.63	3.65	3.63	3.65	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63					
22.80	MKD	MKD14800	41.16	22.51																			4.49	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.17					
22.80	MKD	MKD14800	41.37	22.87																			3.85	3.53	3.52	3.53	3.52	3.53	3.52	3.53	3.52	3.53	3.52	3.53	3.52	3.53	3.52	3.53	3.52	3.53	3.51						
22.80	MKD	MKD14800	41.53	20.53																			3.81	3.61	3.59	3.61	3.59	3.61	3.59	3.61	3.59	3.61	3.5														

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																				
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
36.00	RUS	RSTREA11	41.20	47.82																										-2.83			2.83			-2.83			-2.83		
36.00	RUS	RSTREA11	43.12	41.59																										2.28			2.28			2.28			2.28		
36.00	RUS	RSTREA11	46.40	48.90																										0.23			0.23			0.24			0.24		
36.00	RUS	RSTREA11	49.28	40.13																										6.19			6.19			6.19			6.19		
36.00	RUS	RSTREA11	51.60	50.80																										1.86			1.86			1.86			1.86		
36.00	RUS	RSTREA11	53.28	31.35																										6.28			6.28			6.28			6.28		
36.00	RUS	RSTREA11	54.33	22.88																										1.56			1.56			1.56			1.56		
36.00	RUS	RSTREA11	54.44	20.00																										-3.61			-3.61			-3.61			-3.61		
36.00	RUS	RSTREA11	55.07	22.74																										1.82			1.82			1.82			1.82		
36.00	RUS	RSTREA11	55.11	20.78																										-1.96			-1.96			-1.96			-1.96		
36.00	RUS	RSTREA11	56.13	27.91																										5.13			5.13			5.13			5.13		
36.00	RUS	RSTREA11	59.39	28.00																										5.02			5.02			5.02			5.02		
36.00	RUS	RSTREA11	60.00	51.00																										3.01			3.01			3.01			3.01		
36.00	RUS	RSTREA11	68.20	50.00																										3.72			3.72			3.72			3.72		
36.00	RUS	RSTREA11	68.64	43.28																										4.83			4.83			4.83			4.83		
36.00	RUS	RSTREA11	68.92	28.30																										4.15			4.15			4.15			4.15		
36.00	RUS	RSTREA11	70.00	32.00																										4.57			4.57			4.57			4.57		
36.00	RUS	RSTREA12	41.20	47.82																										-4.33			-4.33			-4.33			-4.22		
36.00	RUS	RSTREA12	43.12	41.59																									0.95			0.95			0.95			1.03			
36.00	RUS	RSTREA12	46.40	48.90																										-1.23			-1.23			-1.23			-1.14		
36.00	RUS	RSTREA12	49.28	40.13																										4.64			4.64			4.64			4.71		
36.00	RUS	RSTREA12	51.60	50.80																										0.35			0.35			0.35			0.42		
36.00	RUS	RSTREA12	53.28	31.35																										4.03			4.03			4.03			4.09		
36.00	RUS	RSTREA12	54.33	22.88																										-0.49			-0.49			-0.49			-0.25		
36.00	RUS	RSTREA12	54.44	20.00																										-3.54			-3.54			-3.54			-2.92		
36.00	RUS	RSTREA12	55.07	22.74																										-0.32			-0.32			-0.32			-0.12		
36.00	RUS	RSTREA12	55.11	20.78																										-2.26			-2.26			-2.26			-1.85		
36.00	RUS	RSTREA12	56.13	27.91																										3.16			3.16			3.16			3.22		
36.00	RUS	RSTREA12	59.39	28.00																										3.20			3.20			3.20			3.25		
36.00	RUS	RSTREA12	60.00	51.00																										1.61			1.61			1.61			1.66		
36.00	RUS	RSTREA12	68.20	50.00																										1.71			1.71			1.71			1.76		
36.00	RUS	RSTREA12	68.64	43.28																										2.51			2.51			2.51			2.56		
36.00	RUS	RSTREA12	68.92	28.30																										2.34			2.34			2.34			2.39		
36.00	RUS	RSTREA12	70.00	32.00																										2.52			2.52			2.52			2.56		
36.00	RUS	RSTRED11	41.20	47.82																											-2.83			2.83			-2.83			-2.83	
36.00	RUS	RSTRED11	43.12	41.59																										2.28			2.28			2.28			2.28		
36.00	RUS	RSTRED11	46.40	48.90																										0.23			0.23			0.24			0.24		
36.00	RUS	RSTRED11	49.28	40.13																										6.19			6.19			6.19			6.19		
36.00	RUS	RSTRED11	51.60	50.80																										1.86			1.86			1.86			1.86		
36.00	RUS	RSTRED11	53.28	31.35																										6.28			6.28			6.28			6.28		
36.00	RUS	RSTRED11	54.33	22.88																										1.56			1.56			1.56			1.56		
36.00	RUS	RSTRED11	54.44	20.00																										-3.61			3.61			-3.61			-3.61		
36.00	RUS	RSTRED11	55.07	22.74																										1.82			1.82			1.82			1.82		
36.00	RUS	RSTRED11	55.11	20.78																										-1.96			-1.96			-1.96			-1.96		
36.00	RUS	RSTRED11	56.13	27.91																										5.13			5.13			5.13			5.13		
36.00	RUS	RSTRED11	59.39	28.00																										5.02			5.02			5.02			5.02		
36.00	RUS	RSTRED11	60.00	51.00																										3.01			3.01			3.01			3.01		

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																				
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
36.00	RUS	RSTRED11	68.20	50.00																											3.72			3.72			3.72			3.72	
36.00	RUS	RSTRED11	68.64	43.28																												4.83			4.83			4.83			4.83
36.00	RUS	RSTRED11	68.92	28.30																												4.15			4.15			4.15			4.15
36.00	RUS	RSTRED11	70.00	32.00																												4.57			4.57			4.57			4.57
36.00	RUS	RSTRED12	41.20	47.82																												-4.33			-4.33			-4.33			-4.22
36.00	RUS	RSTRED12	43.12	41.59																											0.95			0.95			0.95			1.03	
36.00	RUS	RSTRED12	46.40	48.90																											-1.23			-1.23			-1.23			-1.14	
36.00	RUS	RSTRED12	49.28	40.13																											4.64			4.64			4.64			4.71	
36.00	RUS	RSTRED12	51.60	50.80																										0.35			0.35			0.35			0.42		
36.00	RUS	RSTRED12	53.28	31.35																											4.03			4.03			4.03			4.09	
36.00	RUS	RSTRED12	54.33	22.88																											-0.49			-0.49			-0.49			-0.25	
36.00	RUS	RSTRED12	54.44	20.00																											-3.54			-3.54			-3.54			-2.92	
36.00	RUS	RSTRED12	55.07	22.74																										-0.32			-0.32			-0.32			-0.12		
36.00	RUS	RSTRED12	55.11	20.78																										-2.26			-2.26			-2.26			-1.85		
36.00	RUS	RSTRED12	56.13	27.91																										3.16			3.16			3.16			3.22		
36.00	RUS	RSTRED12	59.39	28.00																										3.20			3.20			3.20			3.25		
36.00	RUS	RSTRED12	60.00	51.00																										1.61			1.61			1.61			1.66		
36.00	RUS	RSTRED12	68.20	50.00																										1.71			1.71			1.71			1.76		
36.00	RUS	RSTRED12	68.64	43.28																										2.51			2.51			2.51			2.56		
36.00	RUS	RSTRED12	68.92	28.30																										2.34			2.34			2.34			2.39		
36.00	RUS	RSTRED12	70.00	32.00																										2.52			2.52			2.52			2.56		
36.00	RUS	RSTRSD11	43.12	41.59																										5.05			5.28			5.28			5.28		
36.00	RUS	RSTRSD11	49.28	40.13																										8.88			9.19			9.19			9.19		
36.00	RUS	RSTRSD11	51.60	50.80																										4.48			4.86			4.86			4.86		
36.00	RUS	RSTRSD11	53.28	31.35																										8.90			9.28			9.28			9.28		
36.00	RUS	RSTRSD11	56.13	27.91																										7.72			8.13			8.13			8.13		
36.00	RUS	RSTRSD11	59.39	28.00																										7.61			8.02			8.02			8.02		
36.00	RUS	RSTRSD11	60.00	51.00																										5.70			6.01			6.01			6.01		
36.00	RUS	RSTRSD11	68.20	50.00																										6.35			6.72			6.72			6.72		
36.00	RUS	RSTRSD11	68.64	43.28																										7.43			7.83			7.83			7.83		
36.00	RUS	RSTRSD11	68.92	28.30																										6.72			7.15			7.15			7.15		
36.00	RUS	RSTRSD11	70.00	32.00																										7.14			7.57			7.57			7.57		
36.00	RUS	RSTRSD12	43.12	41.59																										3.95			3.95			3.95			3.95		
36.00	RUS	RSTRSD12	49.28	40.13																										7.64			7.64			7.64			7.71		
36.00	RUS	RSTRSD12	51.60	50.80																										3.35			3.35			3.35			3.42		
36.00	RUS	RSTRSD12	53.28	31.35																										7.03			7.03			7.03			7.09		
36.00	RUS	RSTRSD12	56.13	27.91																										6.16			6.16			6.16			6.22		
36.00	RUS	RSTRSD12	59.39	28.00																										6.20			6.20			6.20			6.25		
36.00	RUS	RSTRSD12	60.00	51.00																										4.61			4.61			4.61			4.66		
36.00	RUS	RSTRSD12	68.20	50.00																										4.71			4.71			4.71			4.76		
36.00	RUS	RSTRSD12	68.64	43.28																										5.51			5.51			5.51			5.56		
36.00	RUS	RSTRSD12	68.92	28.30																										5.34			5.34			5.34			5.39		
36.00	RUS	RSTRSD12	70.00	32.00																										5.52			5.52			5.52			5.56		
36.00	RUS	RSTRSD13	41.20	47.82																											5.23			5.56			5.56			5.57	
36.00	RUS	RSTRSD13	46.40	48.90																										8.48			8.82			8.82			8.82		
36.00	RUS	RSTRSD13	54.33	22.88																										9.82			10.18			10.18			10.18		
36.00	RUS	RSTRSD13	54.44	20.00																										4.85			5.03			5.03			5.03		
36.00	RUS	RSTRSD13	55.07	22.74																										10.19			10.58			10.58			10.58		

ATTACHMENT 3

**Provisional Reference Situation for the Regions 1 and 3 Feeder-link Plans
(17.3 - 18.1 GHz and 14.5 - 14.8 GHz frequency bands)**

Notes to Table 2:

1. Table 2 provides the complete provisional reference situation Equivalent Protection Margins (EPMs) of the Appendix S30A (WRC-2000) Regions 1 and 3 feeder-link Plans (i.e. for all test-points).
2. Characteristics of each of the beams are given in the table contained in Article 9A of Appendix S30A (WRC-2000),as provisionally amended in Attachment 1 to this document.

Table 2 to Attachment 3

**Equivalent Protection Margin (EPM) of Assignments in the Appendix S30A Regions 1 and 3 Plan
in the frequency band 14.5-14.8 GHz
(sorted by orbital position)**

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number												
			Latitude (°N)	Longitude (°E)	2	3	4	5	6	7	8	9	10	11	12	13	14
-37.00	SEN	SEN22201	12.40	-16.20				40.82		39.70		39.70		39.70		39.70	
-37.00	SEN	SEN22201	13.50	-13.40				42.49		41.36		41.36		41.36		41.36	
-37.00	SEN	SEN22201	14.10	-16.10				42.00		40.88		40.88		40.88		40.88	
-37.00	SEN	SEN22201	14.20	-16.20				41.93		40.80		40.80		40.80		40.80	
-37.00	SEN	SEN22201	14.40	-17.30				40.75		39.62		39.62		39.62		39.62	
-37.00	SEN	SEN22201	14.40	-16.20				41.92		40.80		40.80		40.80		40.80	
-37.00	SEN	SEN22201	14.50	-16.60				41.55		40.42		40.42		40.42		40.42	
-37.00	SEN	SEN22201	15.20	-15.10				42.08		40.96		40.96		40.96		40.96	
-37.00	SEN	SEN22201	15.40	-16.10				41.56		40.44		40.44		40.44		40.44	
-37.00	SEN	SEN22201	15.40	-13.20				41.17		40.05		40.05		40.05		40.05	
-37.00	SEN	SEN22202	12.40	-16.20					39.70		39.70		39.70		39.70		40.81
-37.00	SEN	SEN22202	13.50	-13.40					41.36		41.36		41.36		41.36		42.48
-37.00	SEN	SEN22202	14.10	-16.10					40.88		40.88		40.88		40.88		42.00
-37.00	SEN	SEN22202	14.20	-16.20					40.80		40.80		40.80		40.80		41.92
-37.00	SEN	SEN22202	14.40	-17.30					39.62		39.62		39.62		39.62		40.74
-37.00	SEN	SEN22202	14.40	-16.20					40.80		40.80		40.80		40.80		41.92
-37.00	SEN	SEN22202	14.50	-16.60					40.42		40.42		40.42		40.42		41.54
-37.00	SEN	SEN22202	15.20	-15.10					40.96		40.96		40.96		40.96		42.08
-37.00	SEN	SEN22202	15.40	-16.10					40.44		40.44		40.44		40.44		41.56
-37.00	SEN	SEN22202	15.40	-13.20					40.05		40.05		40.05		40.05		41.16
-30.00	TGO	TGO22601	6.00	1.20				15.04		14.18		14.18		14.18		14.18	
-30.00	TGO	TGO22601	6.30	1.90				15.07		14.22		14.22		14.22		14.22	
-30.00	TGO	TGO22601	6.90	0.30				15.94		15.08		15.08		15.08		15.08	
-30.00	TGO	TGO22601	9.20	1.70				15.78		14.93		14.93		14.93		14.93	
-30.00	TGO	TGO22601	11.00	0.70				15.13		14.28		14.28		14.28		14.28	
-30.00	TGO	TGO22601	11.10	-0.20				15.00		14.14		14.14		14.14		14.14	
-30.00	TGO	TGO22602	6.00	1.20					14.18		14.18		14.18		14.18		15.03
-30.00	TGO	TGO22602	6.30	1.90					14.22		14.22		14.22		14.22		15.07
-30.00	TGO	TGO22602	6.90	0.30					15.08		15.08		15.08		15.08		15.93
-30.00	TGO	TGO22602	9.20	1.70					14.93		14.93		14.93		14.93		15.78
-30.00	TGO	TGO22602	11.00	0.70					14.28		14.28		14.28		14.28		15.13
-30.00	TGO	TGO22602	11.10	-0.20					14.14		14.14		14.14		14.14		14.99
-25.00	GHA	GHA10801	5.10	-3.00				14.94		14.07		14.07		14.07		14.07	
-25.00	GHA	GHA10801	6.10	1.20				15.42		14.55		14.55		14.55		14.55	
-25.00	GHA	GHA10801	6.60	-3.30				15.83		14.96		14.96		14.96		14.96	
-25.00	GHA	GHA10801	7.40	-1.40				17.88		17.01		17.01		17.01		17.01	

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number												
			Latitude (°N)	Longitude (°E)	2	3	4	5	6	7	8	9	10	11	12	13	14
-25.00	GHA	GHA10801	11.00	-2.90				15.06		14.19		14.19		14.19		14.19	
-25.00	GHA	GHA10801	11.00	0.10				15.25		14.38		14.38		14.38		14.38	
-25.00	GHA	GHA10802	5.10	-3.00					14.07		14.07		14.07		14.07		14.94
-25.00	GHA	GHA10802	6.10	1.20					14.55		14.55		14.55		14.55		15.41
-25.00	GHA	GHA10802	6.60	-3.30					14.96		14.96		14.96		14.96		15.82
-25.00	GHA	GHA10802	7.40	-1.40					17.01		17.01		17.01		17.01		17.88
-25.00	GHA	GHA10802	11.00	-2.90					14.19		14.19		14.19		14.19		15.06
-25.00	GHA	GHA10802	11.00	0.10					14.38		14.38		14.38		14.38		15.25
-19.20	NIG	NIG11901	4.70	7.00				7.40		5.14		5.14		5.14		5.14	
-19.20	NIG	NIG11901	6.40	3.40				7.58		5.32		5.32		5.32		5.32	
-19.20	NIG	NIG11901	7.80	12.00				7.82		5.55		5.55		5.55		5.55	
-19.20	NIG	NIG11901	9.00	7.00				9.52		7.25		7.25		7.25		7.25	
-19.20	NIG	NIG11901	13.90	13.30				6.42		4.16		4.16		4.16		4.16	
-19.20	NIG	NIG11901	14.00	5.50				6.80		4.53		4.53		4.53		4.53	
-19.20	NIG	NIG11902	4.70	7.00					5.14		5.14		5.14		5.14		7.39
-19.20	NIG	NIG11902	6.40	3.40					5.32		5.32		5.32		5.32		7.56
-19.20	NIG	NIG11902	7.80	12.00					5.55		5.55		5.55		5.55		7.80
-19.20	NIG	NIG11902	9.00	7.00					7.25		7.25		7.25		7.25		9.50
-19.20	NIG	NIG11902	13.90	13.30					4.16		4.16		4.16		4.16		6.40
-19.20	NIG	NIG11902	14.00	5.50					4.53		4.53		4.53		4.53		6.78
-18.80	NMB	NMB02501	-28.30	20.00				7.17		4.74		4.74		4.74		4.74	
-18.80	NMB	NMB02501	-22.60	17.10				9.90		7.47		7.47		7.47		7.47	
-18.80	NMB	NMB02501	-22.00	21.00				9.33		6.90		6.90		6.90		6.90	
-18.80	NMB	NMB02501	-18.00	21.00				8.63		6.20		6.20		6.20		6.20	
-18.80	NMB	NMB02501	-17.60	25.00				6.91		4.48		4.48		4.48		4.48	
-18.80	NMB	NMB02501	-17.00	12.00				7.05		4.62		4.62		4.62		4.62	
-18.80	NMB	NMB02502	-28.30	20.00					4.74		4.74		4.74		4.74		7.16
-18.80	NMB	NMB02502	-22.60	17.10					7.47		7.47		7.47		7.47		9.88
-18.80	NMB	NMB02502	-22.00	21.00					6.90		6.90		6.90		6.90		9.32
-18.80	NMB	NMB02502	-18.00	21.00					6.20		6.20		6.20		6.20		8.62
-18.80	NMB	NMB02502	-17.60	25.00					4.48		4.48		4.48		4.48		6.90
-18.80	NMB	NMB02502	-17.00	12.00					4.62		4.62		4.62		4.62		7.03
-13.00	CME	CME30001	1.40	16.20				17.22		16.34		16.34		16.34		16.34	
-13.00	CME	CME30001	2.20	8.80				17.83		16.95		16.95		16.95		16.95	
-13.00	CME	CME30001	4.80	8.50				18.22		17.34		17.34		17.34		17.34	
-13.00	CME	CME30001	7.70	15.60				19.31		18.43		18.43		18.43		18.43	
-13.00	CME	CME30001	10.00	15.60				18.77		17.89		17.89		17.89		17.89	
-13.00	CME	CME30001	13.20	14.20				17.36		16.48		16.48		16.48		16.48	
-13.00	CME	CME30002	1.40	16.20					16.34		16.34		16.34		16.34		17.21
-13.00	CME	CME30002	2.20	8.80					16.95		16.95		16.95		16.95		17.82
-13.00	CME	CME30002	4.80	8.50					17.34		17.34		17.34		17.34		18.22
-13.00	CME	CME30002	7.70	15.60					18.43		18.43		18.43		18.43		19.30
-13.00	CME	CME30002	10.00	15.60					17.89		17.89		17.89		17.89		18.77
-13.00	CME	CME30002	13.20	14.20					16.48		16.48		16.48		16.48		17.35
-7.00	SDN	SDN_101	3.60	30.50				27.36		26.39		26.39		26.39		26.39	
-7.00	SDN	SDN_101	4.20	28.20				27.43		26.46		26.46		26.46		26.46	

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number												
			Latitude (°N)	Longitude (°E)	2	3	4	5	6	7	8	9	10	11	12	13	14
-7.00	SDN	SDN_101	4.60	36.00				27.06		26.09		26.09		26.09		26.09	
-7.00	SDN	SDN_101	8.50	34.00				28.68		27.71		27.71		27.71		27.71	
-7.00	SDN	SDN_101	10.00	30.00				29.47		28.50		28.50		28.50		28.50	
-7.00	SDN	SDN_101	10.70	23.00				27.43		26.46		26.46		26.46		26.46	
-7.00	SDN	SDN_101	15.60	23.00				28.29		27.32		27.32		27.32		27.32	
-7.00	SDN	SDN_101	15.60	32.60				29.06		28.09		28.09		28.09		28.09	
-7.00	SDN	SDN_101	16.00	36.80				27.93		26.96		26.96		26.96		26.96	
-7.00	SDN	SDN_101	18.00	38.50				27.90		26.93		26.93		26.93		26.93	
-7.00	SDN	SDN_101	20.00	24.00				28.80		27.83		27.83		27.83		27.83	
-7.00	SDN	SDN_101	22.00	25.00				28.19		27.22		27.22		27.22		27.22	
-7.00	SDN	SDN_101	23.00	35.50				27.94		26.97		26.97		26.97		26.97	
-7.00	SDN	SDN_102	3.60	30.50				26.39		26.39		26.39		26.39		26.39	
-7.00	SDN	SDN_102	4.20	28.20				26.46		26.46		26.46		26.46		27.43	
-7.00	SDN	SDN_102	4.60	36.00				26.09		26.09		26.09		26.09		27.06	
-7.00	SDN	SDN_102	8.50	34.00				27.71		27.71		27.71		27.71		28.61	
-7.00	SDN	SDN_102	10.00	30.00				28.50		28.50		28.50		28.50		29.46	
-7.00	SDN	SDN_102	10.70	23.00				26.46		26.46		26.46		26.46		27.43	
-7.00	SDN	SDN_102	15.60	23.00				27.32		27.32		27.32		27.32		28.28	
-7.00	SDN	SDN_102	15.60	32.60				28.09		28.09		28.09		28.09		29.06	
-7.00	SDN	SDN_102	16.00	36.80				26.96		26.96		26.96		26.96		27.92	
-7.00	SDN	SDN_102	18.00	38.50				26.93		26.93		26.93		26.93		27.85	
-7.00	SDN	SDN_102	20.00	24.00				27.83		27.83		27.83		27.83		28.80	
-7.00	SDN	SDN_102	22.00	25.00				27.22		27.22		27.22		27.22		28.19	
-7.00	SDN	SDN_102	23.00	35.50				26.97		26.97		26.97		26.97		27.93	
-1.00	MOZ	MOZ30701	-26.80	32.50				16.60		15.69		15.69		15.69		15.69	
-1.00	MOZ	MOZ30701	-16.00	40.00				17.51		16.60		16.60		16.60		16.60	
-1.00	MOZ	MOZ30701	-15.00	30.30				16.85		15.94		15.94		15.94		15.94	
-1.00	MOZ	MOZ30701	-11.80	35.00				17.71		16.80		16.80		16.80		16.80	
-1.00	MOZ	MOZ30701	-10.30	40.30				16.90		15.99		15.99		15.99		15.99	
-1.00	MOZ	MOZ30702	-26.80	32.50					15.69		15.69		15.69		15.69		16.60
-1.00	MOZ	MOZ30702	-16.00	40.00					16.60		16.60		16.60		16.60		17.50
-1.00	MOZ	MOZ30702	-15.00	30.30					15.94		15.94		15.94		15.94		16.85
-1.00	MOZ	MOZ30702	-11.80	35.00					16.80		16.80		16.80		16.80		17.70
-1.00	MOZ	MOZ30702	-10.30	40.30					15.99		15.99		15.99		15.99		16.85
4.80	AFS	AFS02101	-34.20	18.20				17.66		16.75		16.75		16.75		16.75	
4.80	AFS	AFS02101	-33.80	25.60				17.82		16.91		16.91		16.91		16.91	
4.80	AFS	AFS02101	-29.70	31.00				18.40		17.49		17.49		17.49		17.49	
4.80	AFS	AFS02101	-28.00	16.80				18.14		17.23		17.23		17.23		17.23	
4.80	AFS	AFS02101	-27.00	32.50				18.38		17.47		17.47		17.47		17.47	
4.80	AFS	AFS02101	-26.10	28.80				19.91		19.00		19.00		19.00		19.00	
4.80	AFS	AFS02101	-25.00	20.00				18.39		17.48		17.48		17.48		17.48	
4.80	AFS	AFS02101	-23.00	14.50				11.87		10.96		10.96		10.96		10.96	
4.80	AFS	AFS02101	-23.00	24.00				18.34		17.43		17.43		17.43		17.43	
4.80	AFS	AFS02101	-22.10	30.00				17.72		16.82		16.82		16.82		16.82	
4.80	AFS	AFS02102	-34.20	18.20					16.75		16.75		16.75		16.75		17.65
4.80	AFS	AFS02102	-33.80	25.60					16.91		16.91		16.91		16.91		17.8

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number											
			Latitude (°N)	Longitude (°E)	2	3	4	5	6	7	8	9	10	11	12	13
4.80	AFS	AFS02102	-29.70	31.00					17.49	17.49	17.49	17.49	17.49	17.49	17.49	18.39
4.80	AFS	AFS02102	-28.00	16.80					17.23	17.23	17.23	17.23	17.23	17.23	17.23	18.13
4.80	AFS	AFS02102	-27.00	32.50					17.47	17.47	17.47	17.47	17.47	17.47	17.47	18.38
4.80	AFS	AFS02102	-26.10	28.80					19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.91
4.80	AFS	AFS02102	-25.00	20.00					17.48	17.48	17.48	17.48	17.48	17.48	17.48	18.38
4.80	AFS	AFS02102	-23.00	14.50					10.96	10.96	10.96	10.96	10.96	10.96	10.96	11.86
4.80	AFS	AFS02102	-23.00	24.00					17.43	17.43	17.43	17.43	17.43	17.43	17.43	18.34
4.80	AFS	AFS02102	-22.10	30.00					16.82	16.82	16.82	16.82	16.82	16.82	16.82	17.72
11.00	YEM	YEM_101	12.31	53.72				47.83	47.26	47.26	47.26	47.26	47.26	47.26	47.26	
11.00	YEM	YEM_101	12.64	43.40				50.28	49.71	49.71	49.71	49.71	49.71	49.71	49.71	
11.00	YEM	YEM_101	13.50	46.50				50.23	49.66	49.66	49.66	49.66	49.66	49.66	49.66	
11.00	YEM	YEM_101	14.00	44.50				55.14	54.57	54.57	54.57	54.57	54.57	54.57	54.57	
11.00	YEM	YEM_101	15.00	45.50				55.75	55.18	55.18	55.18	55.18	55.18	55.18	55.18	
11.00	YEM	YEM_101	16.60	52.60				48.81	48.24	48.24	48.24	48.24	48.24	48.24	48.24	
11.00	YEM	YEM_101	17.40	44.16				55.12	54.55	54.55	54.55	54.55	54.55	54.55	54.55	
11.00	YEM	YEM_101	18.40	49.50				47.89	47.32	47.32	47.32	47.32	47.32	47.32	47.32	
11.00	YEM	YEM_102	12.31	53.72					47.26	47.26	47.26	47.26	47.26	47.26	47.26	47.83
11.00	YEM	YEM_102	12.64	43.40					49.71	49.71	49.71	49.71	49.71	49.71	49.71	50.27
11.00	YEM	YEM_102	13.50	46.50					49.66	49.66	49.66	49.66	49.66	49.66	49.66	50.23
11.00	YEM	YEM_102	14.00	44.50					54.57	54.57	54.57	54.57	54.57	54.57	54.57	55.14
11.00	YEM	YEM_102	15.00	45.50					55.18	55.18	55.18	55.18	55.18	55.18	55.18	55.74
11.00	YEM	YEM_102	16.60	52.60					48.24	48.24	48.24	48.24	48.24	48.24	48.24	48.81
11.00	YEM	YEM_102	17.40	44.16					54.55	54.55	54.55	54.55	54.55	54.55	54.55	55.11
11.00	YEM	YEM_102	18.40	49.50					47.32	47.32	47.32	47.32	47.32	47.32	47.32	47.89
34.00	IRN	IRN10901	25.10	61.40	15.52	14.22		14.16		14.16		14.16		14.16		14.16
34.00	IRN	IRN10901	25.90	55.10	16.04	14.75		14.69		14.69		14.69		14.69		14.69
34.00	IRN	IRN10901	27.10	63.30	15.88	14.59		14.53		14.53		14.53		14.53		14.53
34.00	IRN	IRN10901	30.30	48.20	16.32	15.03		14.97		14.97		14.97		14.97		14.97
34.00	IRN	IRN10901	31.30	61.80	16.72	15.43		15.37		15.37		15.37		15.37		15.37
34.00	IRN	IRN10901	34.00	45.40	16.18	14.88		14.82		14.82		14.82		14.82		14.82
34.00	IRN	IRN10901	36.60	61.20	15.24	13.94		13.88		13.88		13.88		13.88		13.88
34.00	IRN	IRN10901	38.20	56.50	16.04	14.74		14.68		14.68		14.68		14.68		14.68
34.00	IRN	IRN10901	39.70	48.00	16.05	14.76		14.70		14.70		14.70		14.70		14.70
34.00	IRN	IRN10901	39.80	44.60	15.34	14.04		13.98		13.98		13.98		13.98		13.98
34.00	IRN	IRN10902	25.10	61.40		14.54		14.16		14.16		14.16		14.16		15.05
34.00	IRN	IRN10902	25.90	55.10		15.07		14.69		14.69		14.69		14.69		15.57
34.00	IRN	IRN10902	27.10	63.30		14.90		14.53		14.53		14.53		14.53		15.41
34.00	IRN	IRN10902	30.30	48.20		15.35		14.97		14.97		14.97		14.97		15.85
34.00	IRN	IRN10902	31.30	61.80		15.75		15.37		15.37		15.37		15.37		16.25
34.00	IRN	IRN10902	34.00	45.40		15.20		14.82		14.82		14.82		14.82		15.70
34.00	IRN	IRN10902	36.60	61.20		14.26		13.88		13.88		13.88		13.88		14.77
34.00	IRN	IRN10902	38.20	56.50		15.06		14.68		14.68		14.68		14.68		15.57
34.00	IRN	IRN10902	39.70	48.00		15.07		14.70		14.70		14.70		14.70		15.58
34.00	IRN	IRN10902	39.80	44.60		14.36		13.98		13.98		13.98		13.98		14.87
36.00	ETH	ETH09201	4.20	42.10				3.00		2.12		2.12		2.12		
36.00	ETH	ETH09201	4.81	35.77				2.33		1.46		1.46		1.46		

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number												
			Latitude (°N)	Longitude (°E)	2	3	4	5	6	7	8	9	10	11	12	13	14
36.00	ETH	ETH09201	5.10	45.00				2.81		1.94		1.94		1.94		1.94	
36.00	ETH	ETH09201	7.90	34.00				2.83		1.96		1.96		1.96		1.96	
36.00	ETH	ETH09201	8.00	47.95				2.31		1.43		1.43		1.43		1.43	
36.00	ETH	ETH09201	10.90	34.60				3.22		2.35		2.35		2.35		2.35	
36.00	ETH	ETH09201	12.46	42.39				4.07		3.19		3.19		3.19		3.19	
36.00	ETH	ETH09201	14.17	40.59				3.16		2.28		2.28		2.28		2.28	
36.00	ETH	ETH09201	14.50	37.18				2.44		1.57		1.57		1.57		1.57	
36.00	ETH	ETH09201	14.91	37.88				2.29		1.41		1.41		1.41		1.41	
36.00	ETH	ETH09202	4.20	42.10				2.12		2.12		2.12		2.12		3.00	
36.00	ETH	ETH09202	4.81	35.77				1.46		1.46		1.46		1.46		2.33	
36.00	ETH	ETH09202	5.10	45.00				1.94		1.94		1.94		1.94		2.82	
36.00	ETH	ETH09202	7.90	34.00				1.96		1.96		1.96		1.96		2.83	
36.00	ETH	ETH09202	8.00	47.95				1.43		1.43		1.43		1.43		2.31	
36.00	ETH	ETH09202	10.90	34.60				2.35		2.35		2.35		2.35		3.22	
36.00	ETH	ETH09202	12.46	42.39				3.19		3.19		3.19		3.19		4.07	
36.00	ETH	ETH09202	14.17	40.59				2.28		2.28		2.28		2.28		3.16	
36.00	ETH	ETH09202	14.50	37.18				1.57		1.57		1.57		1.57		2.44	
36.00	ETH	ETH09202	14.91	37.88					1.41		1.41		1.41		1.41		2.29
37.80	SOM	SOM31201	-1.00	42.00				0.38		0.07		0.07		0.07		0.07	
37.80	SOM	SOM31201	2.00	45.20				1.48		1.17		1.17		1.17		1.17	
37.80	SOM	SOM31201	9.50	44.40				1.97		1.67		1.67		1.67		1.67	
37.80	SOM	SOM31201	11.20	43.20				0.04		-0.26		-0.26		-0.26		-0.26	
37.80	SOM	SOM31201	11.50	50.40				0.59		0.29		0.29		0.29		0.29	
37.80	SOM	SOM31202	-1.00	42.00					0.07		0.07		0.07		0.07		1.97
37.80	SOM	SOM31202	2.00	45.20					1.17		1.17		1.17		1.17		3.07
37.80	SOM	SOM31202	9.50	44.40					1.67		1.67		1.67		1.67		3.57
37.80	SOM	SOM31202	11.20	43.20					-0.26		-0.26		-0.26		-0.26		1.64
37.80	SOM	SOM31202	11.50	50.40					0.29		0.29		0.29		0.29		2.18
38.20	PAK	PAK12701	28.40	71.70		15.91		4.95		2.63		2.63		2.63		2.63	
38.20	PAK	PAK12701	30.80	74.50		15.48		4.52		2.21		2.21		2.21		2.21	
38.20	PAK	PAK12701	30.90	66.50		15.58		4.62		2.31		2.31		2.31		2.31	
38.20	PAK	PAK12701	32.30	75.00		15.26		4.29		1.98		1.98		1.98		1.98	
38.20	PAK	PAK12701	34.00	70.00		14.94		3.98		1.67		1.67		1.67		1.67	
38.20	PAK	PAK12701	35.70	74.50		14.15		3.19		0.88		0.88		0.88		0.88	
38.20	PAK	PAK12702	28.40	71.70			5.93		2.63		2.63		2.63		2.63		5.01
38.20	PAK	PAK12702	30.80	74.50			5.50		2.21		2.21		2.21		2.21		4.58
38.20	PAK	PAK12702	30.90	66.50			5.60		2.31		2.31		2.31		2.31		4.69
38.20	PAK	PAK12702	32.30	75.00			5.27		1.98		1.98		1.98		1.98		4.36
38.20	PAK	PAK12702	34.00	70.00			4.96		1.67		1.67		1.67		1.67		4.04
38.20	PAK	PAK12702	35.70	74.50			4.17		0.88		0.88		0.88		0.88		3.25
42.50	SEY	SEY00001	-10.18	51.16			36.35		35.40		35.40		35.40		35.40		
42.50	SEY	SEY00001	-10.10	47.75			37.09		36.14		36.14		36.14		36.14		
42.50	SEY	SEY00001	-9.36	46.20			36.28		35.33		35.33		35.33		35.33		
42.50	SEY	SEY00001	-7.13	56.26			36.38		35.43		35.43		35.43		35.43		
42.50	SEY	SEY00001	-4.35	55.83			37.10		36.15		36.15		36.15		36.15		
42.50	SEY	SEY00001	-3.71	55.21			36.38		35.44		35.44		35.44		35.44		

Orbital Position ("E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number												
			Latitude ("N)	Longitude ("E)	2	3	4	5	6	7	8	9	10	11	12	13	14
42.50	SEY	SEY00002	-10.18	51.16					35.40		35.40		35.40		35.40		36.45
42.50	SEY	SEY00002	-10.10	47.75					36.14		36.14		36.14		36.14		37.15
42.50	SEY	SEY00002	-9.36	46.20					35.33		35.33		35.33		35.33		36.38
42.50	SEY	SEY00002	-7.13	56.26					35.43		35.43		35.43		35.43		36.48
42.50	SEY	SEY00002	-4.35	55.83					36.15		36.15		36.15		36.15		37.20
42.50	SEY	SEY00002	-3.71	55.21					35.44		35.44		35.44		35.44		36.48
50.00	IRQ	IRQ25601	29.10	44.30				0.59		0.58		0.59		0.59		0.58	
50.00	IRQ	IRQ25601	29.60	48.30				0.05		0.05		0.05		0.05		0.05	
50.00	IRQ	IRQ25601	31.10	41.50				1.41		1.41		1.41		1.41		1.41	
50.00	IRQ	IRQ25601	31.50	47.50				1.51		1.51		1.51		1.51		1.51	
50.00	IRQ	IRQ25601	32.50	38.60				-0.01		-0.01		-0.01		-0.01		-0.01	
50.00	IRQ	IRQ25601	33.10	46.00				2.30		2.30		2.30		2.30		2.30	
50.00	IRQ	IRQ25601	35.50	46.00				0.89		0.89		0.89		0.89		0.89	
50.00	IRQ	IRQ25601	35.60	41.20				1.43		1.43		1.43		1.43		1.43	
50.00	IRQ	IRQ25601	36.50	42.10				0.89		0.89		0.89		0.89		0.89	
50.00	IRQ	IRQ25601	37.10	44.50				-0.06		-0.06		-0.06		-0.06		-0.06	
50.00	IRQ	IRQ25602	29.10	44.30				0.59		0.59		0.58		0.59		0.59	
50.00	IRQ	IRQ25602	29.60	48.30				0.05		0.05		0.05		0.05		0.05	
50.00	IRQ	IRQ25602	31.10	41.50				1.41		1.41		1.41		1.41		1.41	
50.00	IRQ	IRQ25602	31.50	47.50				1.51		1.51		1.51		1.51		1.51	
50.00	IRQ	IRQ25602	32.50	38.60				-0.01		-0.01		-0.01		-0.01		2.49	
50.00	IRQ	IRQ25602	33.10	46.00				2.30		2.30		2.30		2.30		4.81	
50.00	IRQ	IRQ25602	35.50	46.00				0.89		0.89		0.89		0.89		3.39	
50.00	IRQ	IRQ25602	35.60	41.20				1.43		1.43		1.43		1.43		3.93	
50.00	IRQ	IRQ25602	36.50	42.10				0.89		0.89		0.89		0.89		3.39	
50.00	IRQ	IRQ25602	37.10	44.50				-0.06		-0.06		-0.06		-0.06		2.44	
50.00	NPL	NPL12201	26.50	88.00		38.16		3.91		1.20		1.21		1.21		1.20	
50.00	NPL	NPL12201	27.50	83.00		39.49		5.24		2.53		2.53		2.53		2.53	
50.00	NPL	NPL12201	27.90	88.00		39.28		5.02		2.32		2.32		2.32		2.32	
50.00	NPL	NPL12201	28.80	80.20		39.77		5.52		2.81		2.81		2.81		2.81	
50.00	NPL	NPL12201	29.10	84.20		39.57		5.32		2.61		2.61		2.61		2.61	
50.00	NPL	NPL12201	30.10	82.00		38.62		4.37		1.66		1.66		1.66		1.66	
50.00	NPL	NPL12202	26.50	88.00		4.56		1.21		1.21		1.20		1.21		3.89	
50.00	NPL	NPL12202	27.50	83.00		5.89		2.53		2.53		2.53		2.53		5.22	
50.00	NPL	NPL12202	27.90	88.00		5.67		2.32		2.32		2.32		2.32		5.00	
50.00	NPL	NPL12202	28.80	80.20		6.16		2.81		2.81		2.81		2.81		5.50	
50.00	NPL	NPL12202	29.10	84.20		5.96		2.61		2.61		2.61		2.61		5.30	
50.00	NPL	NPL12202	30.10	82.00		5.02		1.66		1.66		1.66		1.66		4.35	
55.80	IND	INDA_101	8.10	77.50		26.90		25.88		25.88		25.88		25.88		25.88	
55.80	IND	INDA_101	8.30	73.00		30.30		29.29		29.28		29.28		29.28		29.28	
55.80	IND	INDA_101	9.10	79.50		27.54		26.53		26.52		26.52		26.52		26.52	
55.80	IND	INDA_101	10.20	79.80		28.25		27.24		27.23		27.23		27.23		27.23	
55.80	IND	INDA_101	10.90	73.70		31.41		30.39		30.39		30.39		30.39		30.39	
55.80	IND	INDA_101	11.80	76.80		29.02		28.01		28.00		28.00		28.00		28.00	
55.80	IND	INDA_101	12.30	71.90		32.07		31.06		31.05		31.05		31.05		31.05	
55.80	IND	INDA_101	12.80	74.80		26.63		25.62		25.61		25.61		25.61		25.61	

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number											
			Latitude (°N)	Longitude (°E)	2	3	4	5	6	7	8	9	10	11	12	13
122.00	CHN	CHN19001	22.33	114.17	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	48.54	51.54		
122.00	CHN	CHN19001	23.00	112.00	47.67	47.67	47.67	47.67	47.67	47.67	47.67	47.67	47.67	50.67		
122.00	CHN	CHN19001	23.30	116.39	47.70	47.70	47.70	47.70	47.70	47.70	47.70	47.70	47.70	50.70		
122.00	CHN	CHN19001	24.53	113.31	47.69	47.69	47.69	47.69	47.69	47.69	47.69	47.69	47.69	50.69		
122.00	CHN	CHN19002	22.33	114.17		42.81	42.81	42.81	42.81	42.81	42.81	42.81	42.81	99.99		
122.00	CHN	CHN19002	23.00	112.00		41.95	41.95	41.95	41.95	41.95	41.95	41.95	41.95	99.99		
122.00	CHN	CHN19002	23.30	116.39		41.97	41.97	41.97	41.97	41.97	41.97	41.97	41.97	99.99		
122.00	CHN	CHN19002	24.53	113.31		41.97	41.97	41.97	41.97	41.97	41.97	41.97	41.97	99.99		
134.00	PNG	PNG13101	-12.00	154.00	26.06	25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23		
134.00	PNG	PNG13101	-9.20	141.00	26.17	25.34	25.34	25.34	25.34	25.34	25.34	25.34	25.34	25.34		
134.00	PNG	PNG13101	-7.00	157.00	26.06	25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23		
134.00	PNG	PNG13101	-2.60	141.00	26.19	25.36	25.36	25.36	25.36	25.36	25.36	25.36	25.36	25.36		
134.00	PNG	PNG13101	-1.00	150.00	26.16	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32		
134.00	PNG	PNG13102	-12.00	154.00		25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23	26.06		
134.00	PNG	PNG13102	-9.20	141.00		25.34	25.34	25.34	25.34	25.34	25.34	25.34	25.34	26.16		
134.00	PNG	PNG13102	-7.00	157.00		25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23	26.06		
134.00	PNG	PNG13102	-2.60	141.00		25.36	25.36	25.36	25.36	25.36	25.36	25.36	25.36	26.18		
134.00	PNG	PNG13102	-1.00	150.00		25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	26.15		
140.00	USA	USAC_101	4.00	146.00	19.93	19.11	19.11	19.11	19.11	19.11	19.11	19.11	19.11	19.11		
140.00	USA	USAC_101	7.00	158.30	21.07	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25		
140.00	USA	USAC_101	7.10	171.10	19.37	18.56	18.56	18.56	18.56	18.56	18.56	18.56	18.56	18.56		
140.00	USA	USAC_101	7.50	134.60	19.60	18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78		
140.00	USA	USAC_101	9.50	138.60	20.80	19.98	19.98	19.98	19.98	19.98	19.98	19.98	19.98	19.98		
140.00	USA	USAC_101	12.50	170.20	20.36	19.54	19.54	19.54	19.54	19.54	19.54	19.54	19.54	19.54		
140.00	USA	USAC_101	13.00	144.50	21.65	20.83	20.83	20.83	20.83	20.83	20.83	20.83	20.83	20.83		
140.00	USA	USAC_101	19.00	-155.00	34.11	33.29	33.29	33.29	33.29	33.29	33.29	33.29	33.29	33.29		
140.00	USA	USAC_101	19.30	166.60	19.40	18.58	18.58	18.58	18.58	18.58	18.58	18.58	18.58	18.58		
140.00	USA	USAC_101	20.00	-158.00	34.67	33.85	33.85	33.85	33.85	33.85	33.85	33.85	33.85	33.85		
140.00	USA	USAC_101	20.00	145.00	19.56	18.74	18.74	18.74	18.74	18.74	18.74	18.74	18.74	18.74		
140.00	USA	USAC_101	21.00	-155.00	34.58	33.76	33.76	33.76	33.76	33.76	33.76	33.76	33.76	33.76		
140.00	USA	USAC_101	21.50	-156.00	34.46	33.64	33.64	33.64	33.64	33.64	33.64	33.64	33.64	33.64		
140.00	USA	USAC_101	22.50	-158.00	34.55	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73		
140.00	USA	USAC_101	23.00	-160.00	34.19	33.37	33.37	33.37	33.37	33.37	33.37	33.37	33.37	33.37		
140.00	USA	USAC_102	4.00	146.00		19.11	19.11	19.11	19.11	19.11	19.11	19.11	19.11	19.92		
140.00	USA	USAC_102	7.00	158.30		20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	21.07		
140.00	USA	USAC_102	7.10	171.10		18.56	18.56	18.56	18.56	18.56	18.56	18.56	18.56	19.37		
140.00	USA	USAC_102	7.50	134.60		18.78	18.78	18.78	18.78	18.78	18.78	18.78	18.78	19.60		
140.00	USA	USAC_102	9.50	138.60		19.98	19.98	19.98	19.98	19.98	19.98	19.98	19.98	20.79		
140.00	USA	USAC_102	12.50	170.20		19.54	19.54	19.54	19.54	19.54	19.54	19.54	19.54	20.36		
140.00	USA	USAC_102	13.00	144.50		20.83	20.83	20.83	20.83	20.83	20.83	20.83	20.83	21.64		
140.00	USA	USAC_102	19.00	-155.00		33.29	33.29	33.29	33.29	33.29	33.29	33.29	33.29	34.11		
140.00	USA	USAC_102	19.30	166.60		18.58	18.58	18.58	18.58	18.58	18.58	18.58	18.58	19.40		
140.00	USA	USAC_102	20.00	-158.00		33.85	33.85	33.85	33.85	33.85	33.85	33.85	33.85	34.67		
140.00	USA	USAC_102	20.00	145.00		18.74	18.74	18.74	18.74	18.74	18.74	18.74	18.74	19.55		
140.00	USA	USAC_102	21.00	-155.00		33.76	33.76	33.76	33.76	33.76	33.76	33.76	33.76	34.58		
140.00	USA	USAC_102	21.50	-156.00		33.64	33.64	33.64	33.64	33.64	33.64	33.64	33.64	34.46		

**Equivalent Protection Margin (EPM) of Assignments in the Appendix S30A Regions 1 and 3 Plan
in the frequency band 17.3-18.1 GHz
(sorted by orbital position)**

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																					
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
-13.20	GAB	GAB26000	2.00	12.50	5.99	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	8.66	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16	10.16			
-13.20	PSE	YYY00001	31.28	34.25																		8.74	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	
-13.20	PSE	YYY00001	31.42	34.97																		9.21	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71	
-13.20	PSE	YYY00001	31.90	35.20																		8.93	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	10.44	
-13.20	PSE	YYY00001	32.22	35.25																		8.55	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	
-12.80	CZE	CZE14401	42.39	16.26	3.05								1.03										0.29																		0.29	
-12.80	CZE	CZE14401	42.39	18.54	2.98								0.96										0.23																		0.23	
-12.80	CZE	CZE14401	45.50	13.51	4.31								2.30										1.56																		1.56	
-12.80	CZE	CZE14401	46.20	21.00	4.20								2.19										1.45																		1.45	
-12.80	CZE	CZE14401	48.00	22.90	2.88								0.87										0.13																		0.13	
-12.80	CZE	CZE14401	48.03	17.10	5.35								3.34										2.60																		2.60	
-12.80	CZE	CZE14401	49.05	22.50	2.79								0.78										0.04																		0.04	
-12.80	CZE	CZE14401	49.52	18.84	4.22								2.21										1.47																		1.47	
-12.80	CZE	CZE14401	50.32	12.11	2.78								0.77										0.03																		0.03	
-12.80	CZE	CZE14401	51.05	14.32	3.24								1.23										0.49																		0.49	
-12.80	CZE	CZE14402	42.39	16.26										0.34										-0.42																		-0.42
-12.80	CZE	CZE14402	42.39	18.54										0.28										-0.49																		-0.49
-12.80	CZE	CZE14402	45.50	13.51										1.61										0.84																		0.84
-12.80	CZE	CZE14402	46.20	21.00										1.50										0.73																		0.73
-12.80	CZE	CZE14402	48.00	22.90										0.18										-0.59																		-0.59
-12.80	CZE	CZE14402	48.03	17.10										2.65										1.88																		1.88
-12.80	CZE	CZE14402	49.05	22.50										0.09										-0.68																		-0.68
-12.80	CZE	CZE14402	49.52	18.84										1.52										0.75																		0.75
-12.80	CZE	CZE14402	50.32	12.11										0.08										-0.69	-0.69																-0.69	
-12.80	CZE	CZE14402	51.05	14.32	0.54									0.54										-0.23	-0.23																-0.23	
-12.80	CZE	CZE14403	42.39	16.26	0.34																		-0.42	-0.42																		
-12.80	CZE	CZE14403	42.39	18.54	0.28																		-0.49	-0.49																		
-12.80	CZE	CZE14403	45.50	13.51	1.61																		0.84	0.84																		
-12.80	CZE	CZE14403	46.20	21.00	1.50																	0.73	0.73																			
-12.80	CZE	CZE14403	48.00	22.90	0.18																		-0.59	-0.59																		
-12.80	CZE	CZE14403	48.03	17.10	2.65																		1.88	1.88																		
-12.80	CZE	CZE14403	49.05	22.50	0.09																		-0.68	-0.68																		
-12.80	CZE	CZE14403	49.52	18.84	1.52																		0.75	0.75																		
-12.80	CZE	CZE14403	50.32	12.11	0.08																		-0.69	-0.69																		
-12.80	CZE	CZE14403	51.05	14.32	0.54																		-0.23	-0.23																		
-12.80	HNG	HNG10601	42.39	16.26		1.03								1.03									1.03																		0.29	
-12.80	HNG	HNG10601	42.39	18.54		0.96								0.96									0.96																		0.23	
-12.80	HNG	HNG10601	45.50	13.51		2.30								2.30									2.30																		1.56	
-12.80	HNG	HNG10601	46.20	21.00		2.18								2.18									2.18																		1.45	
-12.80	HNG	HNG10601	48.00	22.90		0.87								0.87									0.87																		0.13	
-12.80	HNG	HNG10601	48.03	17.10		3.33								3.33									3.33																		2.60	
-12.80	HNG	HNG10601	49.05	22.50		0.78								0.78									0.78																		0.04	
-12.80	HNG	HNG10601	49.52	18.84		2.21								2.21									2.21																		1.47	
-12.80	HNG	HNG10601	50.32	12.11		0.76								0.76									0.76																		0.03	
-12.80	HNG	HNG10601	51.05	14.32		1.22								1.22									1.22																		0.49	
-12.80	HNG	HNG10602	42.39	16.26			0.34																																			-0.42
-12.80	HNG	HNG10602	42.39	18.54			0.28																																			-0.49
-12.80	HNG	HNG10602	45.50	13.51			1.61																																		0.84	
-12.80	HNG	HNG10602	46.20	21.00			1.50					</																														

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																									
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40		
-12.80	HNG	HNG10602	48.03	17.10						2.65																													1.88				1.88			
-12.80	HNG	HNG10602	49.05	22.50						0.09																													-0.68			-0.68				
-12.80	HNG	HNG10602	49.52	18.84						1.52																													0.75			0.75				
-12.80	HNG	HNG10602	50.32	12.11						0.08																												-0.69			-0.69					
-12.80	HNG	HNG10602	51.05	14.32						0.54																													-0.23			-0.23				
-12.80	HNG	HNG10603	42.39	16.26	0.34																																				-0.42		-0.42			
-12.80	HNG	HNG10603	42.39	18.54	0.28																																			-0.49		-0.49				
-12.80	HNG	HNG10603	45.50	13.51	1.61																																		0.84		0.84					
-12.80	HNG	HNG10603	46.20	21.00	1.50																																		0.73		0.73					
-12.80	HNG	HNG10603	48.00	22.90	0.18																																		-0.59		-0.59					
-12.80	HNG	HNG10603	48.03	17.10	2.65																																		1.88		1.88					
-12.80	HNG	HNG10603	49.05	22.50	0.09																																		-0.68		-0.68					
-12.80	HNG	HNG10603	49.52	18.84	1.52																																		0.75		0.75					
-12.80	HNG	HNG10603	50.32	12.11	0.08																																		-0.69		-0.69					
-12.80	HNG	HNG10603	51.05	14.32	0.54																																		-0.23		-0.23					
-12.80	HRV	HRV14801	42.39	16.26						1.03																												1.09								
-12.80	HRV	HRV14801	42.39	18.54	0.97																																		0.96		1.02					
-12.80	HRV	HRV14801	45.50	13.51						2.30																											2.36									
-12.80	HRV	HRV14801	46.20	21.00						2.19																											2.24									
-12.80	HRV	HRV14801	48.00	22.90						0.87																											0.93									
-12.80	HRV	HRV14801	48.03	17.10						3.34																											3.39									
-12.80	HRV	HRV14801	49.05	22.50						0.78																											0.84									
-12.80	HRV	HRV14801	49.52	18.84						2.21																											2.21									
-12.80	HRV	HRV14801	50.32	12.11						0.77																											0.77									
-12.80	HRV	HRV14801	51.05	14.32						1.23																											1.23									
-12.80	HRV	HRV14802	42.39	16.26							0.34																															-0.42				
-12.80	HRV	HRV14802	42.39	18.54							0.28																															-0.49				
-12.80	HRV	HRV14802	45.50	13.51							1.61																															0.84				
-12.80	HRV	HRV14802	46.20	21.00							1.50																															0.73				
-12.80	HRV	HRV14802	48.00	22.90							0.18																															-0.59				
-12.80	HRV	HRV14802	48.03	17.10							2.65																															1.88				
-12.80	HRV	HRV14802	49.05	22.50							0.09																													0.09						
-12.80	HRV	HRV14802	49.52	18.84							1.52																													0.75						
-12.80	HRV	HRV14802	50.32	12.11							0.08																															-0.69				
-12.80	HRV	HRV14802	51.05	14.32							0.54																															-0.23				
-12.80	HRV	HRV14803	42.39	16.26	0.34																																				-0.42		-0.42			
-12.80	HRV	HRV14803	42.39	18.54	0.28																																		-0.49		-0.49					
-12.80	HRV	HRV14803	45.50	13.51	1.61																																		0.84		0.84					
-12.80	HRV	HRV14803	46.20	21.00	1.50																																		0.73		0.73					
-12.80	HRV	HRV14803	48.00	22.90	0.18																																		-0.59		-0.59					
-12.80	HRV	HRV14803	48.03	17.10	2.65																																		1.88		1.88					
-12.80	HRV	HRV14803	49.05	22.50	0.09																																		-0.68		-0.68					
-12.80	HRV	HRV14803	49.52	18.84	1.52																																		0.75		0.75					
-12.80	HRV	HRV14803	50.32	12.11	0.08																																		-0.69		-0.69					
-12.80	HRV	HRV14803	51.05	14.32	0.5																																									

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																							
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
110.00	RUS	RUS00401	72.40	78.00																							30.87	99.99	15.75	14.91	14.91	14.91	14.91											
110.00	RUS	RUS00401	73.29	128.00																								29.77	99.99	14.64	13.80	13.80	13.80	13.80										
110.00	RUS	RUS00402	42.42	130.62																									99.99	22.12														
110.00	RUS	RUS00402	43.93	145.56																									99.99	21.84														
110.00	RUS	RUS00402	49.22	87.30																									99.99	21.35														
110.00	RUS	RUS00402	51.00	104.00																									99.99	22.21														
110.00	RUS	RUS00402	54.50	168.08																									99.99	20.78														
110.00	RUS	RUS00402	60.88	77.00																									99.99	21.66														
110.00	RUS	RUS00402	62.68	179.50																									99.99	22.49														
110.00	RUS	RUS00402	69.62	162.46																									99.99	22.30														
110.00	RUS	RUS00402	72.40	78.00																									99.99	22.47														
110.00	RUS	RUS00402	73.29	128.00																									99.99	21.37														
116.00	KOR	KOR11201	33.10	126.30																										28.33	29.34	29.34	29.34	29.34	29.34									
116.00	KOR	KOR11201	34.10	125.10																										28.78	29.79	29.79	29.79	29.79	29.79									
116.00	KOR	KOR11201	35.10	129.10																										29.98	30.98	30.98	30.98	30.98	30.98									
116.00	KOR	KOR11201	37.51	130.91																										28.29	29.30	29.30	29.30	29.30	29.30									
116.00	KOR	KOR11201	37.89	126.74																										29.61	30.62	30.62	30.62	30.62	30.62									
116.00	KOR	KOR11201	38.00	124.70																										28.17	29.18	29.18	29.18	29.18	29.18									
116.00	KOR	KOR11201	38.30	127.20																										29.29	30.30	30.30	30.30	30.30	30.30									
116.00	KOR	KOR11201	38.30	127.90																										29.32	30.33	30.33	30.33	30.33	30.33									
116.00	KOR	KOR11201	38.50	128.40																										29.03	30.04	30.04	30.04	30.04	30.04									
116.00	KOR	KOR11202	33.10	126.30																												31.98	31.98	31.98	31.98	31.98	31.98							
116.00	KOR	KOR11202	34.10	125.10																												32.43	32.43	32.43	32.43	32.43	32.43							
116.00	KOR	KOR11202	35.10	129.10																											33.63	33.63	33.63	33.63	33.63	33.63								
116.00	KOR	KOR11202	37.51	130.91																											31.94	31.94	31.94	31.94	31.94	31.94								
116.00	KOR	KOR11202	37.89	126.74																												33.26	33.26	33.26	33.26	33.26	33.26							
116.00	KOR	KOR11202	38.00	124.70																												31.82	31.82	31.82	31.82	31.82	31.82							
116.00	KOR	KOR11202	38.30	127.20																												32.94	32.94	32.94	32.94	32.94	32.94							
116.00	KOR	KOR11202	38.30	127.90																												32.97	32.97	32.97	32.97	32.97	32.97							
116.00	KOR	KOR11202	38.50	128.40																												32.69	32.69	32.69	32.69	32.69	32.69							
121.80	USA	MRA33200	4.00	146.00	4.13	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12					
121.80	USA	MRA33200	7.00	158.30	4.92	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91					
121.80	USA	MRA33200	7.10	171.10	3.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23					
121.80	USA	MRA33200	7.50	134.60	3.76	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75						
121.80	USA	MRA33200	9.50	138.60	4.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98						
121.80	USA	MRA33200	12.50	170.20	4.21	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20						
121.80	USA	MRA33200	13.00	144.50	5.76	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75						
121.80	USA	MRA33200	19.30	166.60	3.37	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36						
121.80	USA	MRA33200	20.00	-158.00	17.57	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.56							
121.80	USA	MRA33200	20.00	145.00	3.58	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57							
121.80	USA	MRA33200	22.50	-158.00	17.36	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35									
121.80	USA	MRA33200	23.00	-160.00	17.20	14.																																						

ATTACHMENT 4

Provisional Reference Situation for the Regions 1 and 3 Downlink List of additional uses

Notes to Table 3:

1. Table 3 provides the complete provisional reference situation Equivalent Protection Margins (EPMs) of the Resolution 542 (WRC-2000) Regions 1 and 3 downlink List of additional uses (i.e. for all test-points).
2. Characteristics of each of the beams are given in the table contained in Part I of Annex 2 to Resolution 542 (WRC-2000).

Table 3 to Attachment 4

Equivalent Protection Margin (EPM) of Assignments in the Regions 1 and 3 Downlink List (sorted by orbital position)

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																								
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
-7.00F	F93D2756	41.20	9.50																																										
-7.00F	F93D2756	42.50	3.00																																										
-7.00F	F93D2756	43.30	-1.90																																										
-7.00F	F93D2756	48.50	-4.50																																										
-7.00F	F93D2756	49.10	8.10																																										
-7.00F	F93D2756	51.20	2.50																																										
-7.00F	F93D2757	41.20	9.50																																										
-7.00F	F93D2757	42.50	3.00																																										
-7.00F	F93D2757	43.30	-1.90																																										
-7.00F	F93D2757	48.50	-4.50																																										
-7.00F	F93D2757	49.10	8.10																																										
-7.00F	F93D2757	51.20	2.50																																										
-7.00F	F93D3355	41.20	9.50																																										
-7.00F	F93D3355	42.50	3.00																																										
-7.00F	F93D3355	43.30	-1.90																																										
-7.00F	F93D3355	48.50	-4.50																																										
-7.00F	F93D3355	49.10	8.10																																										
-7.00F	F93D3355	51.20	2.50																																										
-7.00F	F93D3356	41.20	9.50																																										
-7.00F	F93D3356	42.50	3.00																																										
-7.00F	F93D3356	43.30	-1.90																																										
-7.00F	F93D3356	48.50	-4.50																																										
-7.00F	F93D3356	49.10	8.10																																										
-7.00F	F93D3356	51.20	2.50																																										
-7.00F	F93D3357	41.20	9.50																																										
-7.00F	F93D3357	42.50	3.00																																										
-7.00F	F93D3357	43.30	-1.90																																										
-7.00F	F93D3357	48.50	-4.50																																										
-7.00F	F93D3357	49.10	8.10																																										
-7.00F	F93D3357	51.20	2.50																																										
-0.80NOR	BIFROS21	55.00	9.00																																										
-0.80NOR	BIFROS21	55.00	15.00																																										
-0.80NOR	BIFROS21	58.80	6.00																																										
-0.80NOR	BIFROS21	60.50	23.00																																										
-0.80NOR	BIFROS21	60.50	27.50																																										
-0.80NOR	BIFROS21	62.00	5.00																																										
-0.80NOR	BIFROS21	62.50	30.00																																										
-0.80NOR	BIFROS21	69.00	27.50																																										
-0.80NOR	BIFROS21	70.00	30.00																																										
-0.80NOR	BIFROS21	71.00	26.00																																										
-0.80NOR	BIFROS22	55.00	9.00	-11.17		-1.40		-140		0.77		0.90																																	
-0.80NOR	BIFROS22	55.00	15.00	-1.44		-2.19		-2.19		-0.43		-0.12		0.84																															
-0.80NOR	BIFROS22	58.80	6.00	0.02		-0.47		-0.47		2.31		2.47																																	
-0.80NOR	BIFROS22	60.50	23.00	0.54		0.53		0.53		-0.22		0.23																																	
-0.80NOR	BIFROS22	60.50	27.50	2.81		-2.81		-2.81		-2.50		-2.19		-0.95																															
-0.80NOR	BIFROS22	62.00	5.00	0.30		-0.17		-0.17		2.91		3.12		3.54																															
-0.80NOR	BIFROS22	62.50	30.00	-5.26		-5.27		-5.27		4.52		4.20		-3.26																															
-0.80NOR	BIFROS22	69.00	27.50	-28.78		-28.78		-28.78		-28.97		-28.36		-28.12																															
-0.80NOR	BIFROS22	70.00	30.00	-28.77		-28.77		-28.77		-28.59		-28.00		-27.77																															
-0.80NOR	BIFROS22	71.00	26.00	1.24		1.23		1.23		1.20		1.82		1.88																															
-0.80NOR	BIFROST	55.00	9.00		-3.47		-3.57		-2.32		-1.27		-0.95																																
-0.80NOR	BIFROST	55.00	15.00		-2.84		-3.09		-1.85		-1.13		-0.54																																
-0.80NOR	BIFROST	58.80	6.00		-5.55		-5.75	</																																					

Orbital Position ("E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																						
			Latitude ("N)	Longitude ("E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
5.00	S	S12ADS2D	48.40	26.30																		3.67																					
5.00	S	S12ADS2D	52.70	4.90																		2.20																					
5.00	S	S12ADS2D	54.40	10.00																		0.32																					
5.00	S	S12ADS2D	54.50	-2.50																		1.85																					
5.00	S	S12ADS2D	54.80	20.50																		1.62																					
5.00	S	S12ADS2D	55.30	23.20																		2.24																					
5.00	S	S12ADS3A	35.00	33.40		-3.57																	-0.37																				
5.00	S	S12ADS3A	36.12	-5.50		1.59																	0.82																				
5.00	S	S12ADS3A	38.50	22.50		-0.64																	-1.22																				
5.00	S	S12ADS3A	38.70	-9.20		1.04																	0.23																				
5.00	S	S12ADS3A	38.70	29.10		-0.40																	-0.21																				
5.00	S	S12ADS3A	39.70	16.10		-2.57																	-3.52																				
5.00	S	S12ADS3A	43.30	-2.20		1.48																	0.54																				
5.00	S	S12ADS3A	43.30	5.90		1.03																	-1.98																				
5.00	S	S12ADS3A	43.60	-6.00		1.69																	0.76																				
5.00	S	S12ADS3A	48.00	-3.50		1.50																	0.71																				
5.00	S	S12ADS3A	48.40	26.30		1.06																	-0.23																				
5.00	S	S12ADS3A	52.70	4.90		0.46																	0.46																				
5.00	S	S12ADS3A	54.40	10.00		-2.14																	-1.42																				
5.00	S	S12ADS3A	54.50	-2.50		0.34																	0.52																				
5.00	S	S12ADS3A	54.80	20.50		0.04																	-0.50																				
5.00	S	S12ADS3A	55.30	23.20		0.69																	0.25																				
5.00	S	S12ADS3D	35.00	33.40		-0.60																	2.53																				
5.00	S	S12ADS3D	36.12	-5.50		4.17																	3.06																				
5.00	S	S12ADS3D	38.50	22.50		1.91																	1.22																				
5.00	S	S12ADS3D	38.70	-9.20		3.62																	2.47																				
5.00	S	S12ADS3D	38.70	29.10		2.42																	2.38																				
5.00	S	S12ADS3D	39.70	16.10		0.12																	-0.92																				
5.00	S	S12ADS3D	43.30	-2.20		4.04																	2.81																				
5.00	S	S12ADS3D	43.30	5.90		3.14																	0.39																				
5.00	S	S12ADS3D	43.60	-6.00		4.24																	3.02																				
5.00	S	S12ADS3D	48.00	-3.50		3.56																	2.78																				
5.00	S	S12ADS3D	48.40	26.30		3.65																	2.14																				
5.00	S	S12ADS3D	52.70	4.90		2.19																	2.70																				
5.00	S	S12ADS3D	54.40	10.00		-0.60																	0.38																				
5.00	S	S12ADS3D	54.50	-2.50		1.84																	2.60																				
5.00	S	S12ADS3D	54.80	20.50		1.13																	0.92																				
5.00	S	S12ADS3D	55.30	23.20		2.14																	1.90																				
5.00	S	S12DN1A	49.60	22.20	0.23			0.23			0.23																																
5.00	S	S12DN1A	54.80	20.50	3.72			3.72			3.72																																
5.00	S	S12DN1A	55.00	8.80	-0.22			-0.22			-0.22																																
5.00	S	S12DN1A	55.40	13.00	3.32			3.32			3.32																																
5.00	S	S12DN1A	55.50	14.00	3.58			3.58			3.58																																
5.00	S	S12DN1A	59.00	5.70	-2.14			-2.14			-2.14																																
5.00	S	S12DN1A	59.00	24.20	1.05			1.05			1.05																																
5.00	S	S12DN1A	60.00	10.80	0.54			0.54			0.54																																
5.00	S	S12DN1A	60.00	18.40	2.46			2.46			2.46																																
5.00	S	S12DN1A	61.50	5.00	-2.28			-2.28			-2.28																																
5.00	S	S12DN1A	64.50	21.20	2.21			2.21			2.21																																
5.00	S	S12DN1A	65.80	24.00	-35.37			-35.37			-35.37																																
5.00	S	S12DN1A	68.00	20.50	2.65			2.65			2.65																																
5.00	S	S12DN1A	69.70	20.20	-25.02			-25.02			-25.02																																
5.00	S	S12DN1D	49.60	22.20	2.21			2.21			2.21	</td																															

Orbital Position (°E)	Admin. Symbol	Beam Identifi-cation	Test Point		EPM (dB) / Channel Number																																								
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
5.00S	S12DN1D	60.00	10.80		2.07				2.07																																				
5.00S	S12DN1D	60.00	18.40		4.31				4.31																																				
5.00S	S12DN1D	61.50	5.00		-0.87				-0.87																																				
5.00S	S12DN1D	64.50	21.20		4.47				4.47																																				
5.00S	S12DN1D	65.80	24.00		-32.78				32.78																																				
5.00S	S12DN1D	68.00	20.50		5.50				5.50																																				
5.00S	S12DN1D	69.70	20.20		-22.16				-22.16																																				
5.00S	S12DN2A	49.60	22.20																																										
5.00S	S12DN2A	54.80	20.50																																										
5.00S	S12DN2A	55.00	8.80																																										
5.00S	S12DN2A	55.40	13.00																																										
5.00S	S12DN2A	55.50	14.00																																										
5.00S	S12DN2A	59.00	5.70																																										
5.00S	S12DN2A	60.20	25.00																																										
5.00S	S12DN2A	61.50	5.00																																										
5.00S	S12DN2A	65.80	24.00																																										
5.00S	S12DN2A	68.00	20.50																																										
5.00S	S12DN2A	71.00	25.00																																										
5.00S	S12DN2D	49.60	22.20																																										
5.00S	S12DN2D	50.40	30.30																																										
5.00S	S12DN2D	51.00	25.00																																										
5.00S	S12DN2D	54.60	22.20																																										
5.00S	S12DN2D	54.80	20.50																																										
5.00S	S12DN2D	55.00	8.80																																										
5.00S	S12DN2D	55.40	13.00																																										
5.00S	S12DN2D	55.50	14.00																																										
5.00S	S12DN2D	59.00	5.70																																										
5.00S	S12DN2D	60.00	10.80																																										
5.00S	S12DN2D	60.20	25.00																																										
5.00S	S12DN2D	61.50	5.00																																										
5.00S	S12DN2D	65.80	24.00																																										
5.00S	S12DN2D	68.00	20.50																																										
5.00S	S12DN2D	70.40	30.30																																										
5.00S	S12DN2D	71.00	25.00																																										
5.00S	S12DN3A	49.60	22.20																																										
5.00S	S12DN3A	54.80	20.50																																										
5.00S	S12DN3A	55.00	8.80																																										
5.00S	S12DN3A	55.40	13.00																																										
5.00S	S12DN3A	55.50	14.00																																										
5.00S	S12DN3A	59.00	5.70																																										
5.00S	S12DN3A	60.00	10.80																																										
5.00S	S12DN3A	60.20	25.00																																										
5.00S	S12DN3A	61.50	5.00																																										
5.00S	S12DN3A	65.80	24.00																																										
5.00S	S12DN3A	68.00	20.50																																										
5.00S	S12DN3A	70.40	30.30																																										
5.00S	S12DN3A	71.00	25.00				</td																																						

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																				
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
5.00	S	S12DS1A	35.00	33.40																										0.08					0.08						
5.00	S	S12DS1A	36.12	-5.50																										1.69					1.69						
5.00	S	S12DS1A	38.50	22.50																										-0.90					-0.90						
5.00	S	S12DS1A	38.70	-9.20																										1.07					1.07						
5.00	S	S12DS1A	38.70	29.10																										1.29					1.29						
5.00	S	S12DS1A	39.70	16.10																										4.00					4.00						
5.00	S	S12DS1A	43.30	-2.20																										1.02					1.02						
5.00	S	S12DS1A	43.30	5.90																										-2.49					-2.49						
5.00	S	S12DS1A	43.60	-6.00																										1.49					1.49						
5.00	S	S12DS1A	48.00	-3.50																										0.15					0.15						
5.00	S	S12DS1A	48.40	26.30																										-0.28					-0.28						
5.00	S	S12DS1A	52.70	4.90																										-2.43					-2.41						
5.00	S	S12DS1A	54.40	10.00																										-4.14					-3.68						
5.00	S	S12DS1A	54.50	-2.50																										-2.66					-2.66						
5.00	S	S12DS1A	54.80	20.50																										-1.61					-1.06						
5.00	S	S12DS1A	55.30	23.20																										-0.78					-0.41						
5.00	S	S12DS1D	35.00	33.40																										2.88					2.88						
5.00	S	S12DS1D	36.12	-5.50																										3.23					3.23						
5.00	S	S12DS1D	38.50	22.50																										1.26					1.26						
5.00	S	S12DS1D	38.70	-9.20																										2.62					2.62						
5.00	S	S12DS1D	38.70	29.10																										3.33					3.33						
5.00	S	S12DS1D	39.70	16.10																										-1.52					-1.52						
5.00	S	S12DS1D	43.30	-2.20																										2.67					2.67						
5.00	S	S12DS1D	43.30	5.90																										-0.33					-0.33						
5.00	S	S12DS1D	43.60	-6.00																										3.08					3.08						
5.00	S	S12DS1D	48.00	-3.50																										1.28					1.28						
5.00	S	S12DS1D	48.40	26.30																										1.66					1.66						
5.00	S	S12DS1D	52.70	4.90																										-1.52					-1.52						
5.00	S	S12DS1D	54.40	10.00																										-2.82					-2.82						
5.00	S	S12DS1D	54.50	-2.50																										-2.06					-2.06						
5.00	S	S12DS1D	54.80	20.50																										-0.33					-0.19						
5.00	S	S12DS1D	55.30	23.20																										0.41					0.43						
5.00	S	S12DS2A	35.00	33.40																										0.07					0.07						
5.00	S	S12DS2A	36.12	-5.50																										1.50					1.50						
5.00	S	S12DS2A	38.50	22.50																										0.98					0.98						
5.00	S	S12DS2A	38.70	-9.20																										0.89					0.89						
5.00	S	S12DS2A	38.70	29.10																										1.17					1.17						
5.00	S	S12DS2A	39.70	16.10																										-4.04					-4.04						
5.00	S	S12DS2A	43.30	-2.20																										0.95					0.95						
5.00	S	S12DS2A	43.30	5.90																										-2.51					-2.51						
5.00	S	S12DS2A	43.60	-6.00																										1.34					1.34						
5.00	S	S12DS2A	48.00	-3.50																										0.76					0.76						
5.00	S	S12DS2A	48.40	26.30																										-0.35					-0.35						
5.00	S	S12DS2A	52.70	4.90																										-0.67					-0.64						
5.00	S	S12DS2A	54.40	10.00																										-1.55					-0.89						
5.00	S	S12DS2A	54.50	-2.50																										-0.35					-0.35						
5.00	S	S12DS2A	54.80	20.50																										-0.16					-0.52						
5.00	S	S12DS2A	55.30	23.20																										0.24					0.68						
5.00	S	S12DS2D	35.00	33.40																										2.90					2.90						
5.00	S	S12DS2D	36.12	-5.50																										3.18					3.18						
5.00	S	S12DS2D	38.50	22.50																										1.27					1.27						
5.00	S	S12DS2D	38.70	-9.20																										2.58					2.58						
5.00	S	S12DS2D	38.70	29.10																										3.30					3.30						
5.00	S	S12DS2D	39.70	16.10																										-1.52					-1.52						
5.00	S	S12DS2D	43.30	-2.20																										2.75					2.75						
5.00	S	S12DS2D																																							

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																						
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
13.00	F/EUT	E127DSWA	59.92	30.33	4.99		3.06		2.85		2.86		2.85		2.86		2.41		2.41		2.41		2.75		3.65		3.50		3.47		3.50		1.54		1.54		2.32		2.33		2.32		1.68
13.00	F/EUT	E127DSWA	59.93	10.75	2.85		1.01		0.33		0.36		0.32		0.33		0.25		0.25		0.25		0.77		0.07		0.15		0.00		0.14		-1.62		-1.53		-0.92		-0.82		-0.92		-1.38
13.00	F/EUT	E127DSWB	35.33	25.13	1.42		1.87		2.38		2.38		2.38		2.38		2.39		2.38		1.88		2.25		-0.82		-0.82		-0.82		-0.82		-0.83		-0.82		-0.82		-0.82		-0.82		-0.36
13.00	F/EUT	E127DSWB	36.83	10.22	5.95		6.69		7.60		7.59		7.60		7.60		7.61		7.60		6.71		5.99		-2.15		-2.15		-2.15		-2.15		-2.15		-2.15		-2.15		-2.15		-2.15		-1.91
13.00	F/EUT	E127DSWB	38.73	-9.13	4.35		5.49		7.09		7.06		7.06		7.04		6.99		5.45		3.90		3.95		3.88		3.91		3.92		3.85		3.96		3.83		4.00		3.80		6.30		
13.00	F/EUT	E127DSWB	40.42	-3.72	3.73		4.67		5.66		5.69		5.65		5.64		5.59		4.59		3.42		3.60		3.48		3.54		3.53		3.46		3.58		3.42		3.65		3.37		5.75		
13.00	F/EUT	E127DSWB	41.03	28.95	2.33		3.09		4.06		4.05		4.06		4.06		4.07		4.06		3.11		2.62		-0.51		-0.51		-0.51		-0.51		-0.51		-0.51		-0.51		-0.51		-0.01		
13.00	F/EUT	E127DSWB	41.33	19.82	4.34		5.14		6.11		6.12		6.11		6.12		6.12		6.12		5.14		4.62		-1.38		-1.38		-1.38		-1.38		-1.38		-1.38		-1.38		-1.38		-1.04		
13.00	F/EUT	E127DSWB	41.47	12.87	4.71		5.60		6.67		6.70		6.66		6.69		6.68		5.57		4.67		3.40		-3.41		-3.41		-3.41		-3.41		-3.40		-3.40		-3.40		-3.15				
13.00	F/EUT	E127DSWB	43.62	1.45	2.80		3.02		3.92		3.63		3.84		3.64		3.76		3.65		3.08		2.42		0.26		0.21		0.26		0.11		0.32		0.09		0.38		1.39				
13.00	F/EUT	E127DSWB	46.07	23.55	3.94		4.56		5.38		5.34		5.37		5.35		5.37		4.58		3.99		1.01		0.94		1.01		0.94		0.93		0.95		0.93		0.95		1.67				
13.00	F/EUT	E127DSWB	46.32	7.65	2.09		2.49		3.04		3.00		2.98		3.00		2.93		2.99		2.39		1.92		-2.56		-2.59		-2.59		-2.56		-2.53		-2.50		-2.69		-2.23				
13.00	F/EUT	E127DSWB	47.38	0.70	1.59		2.01		2.63		2.56		2.59		2.55		2.54		2.53		1.94		1.36		-0.15		-0.22		-0.21		-0.16		-0.10		-0.34		-0.03		-0.39		0.56		
13.00	F/EUT	E127DSWB	48.22	16.37	2.36		2.42		3.03		2.74		3.02		2.85		3.00		2.83		2.64		2.10		-1.03		-1.15		-1.08		-1.10		-1.47		-1.06		-1.23		-1.01		-1.28		-0.87
13.00	F/EUT	E127DSWB	50.50	30.47	3.74		4.51		5.48		5.48		5.48		5.48		5.48		4.52		3.80		2.34		2.34		2.31		2.17		2.31		2.31		2.31		2.85						
13.00	F/EUT	E127DSWB	51.90	-8.47	3.30		3.96		4.39		4.52		4.41		4.48		4.43		4.44		3.87		3.11		3.30		3.15		3.23		3.23		3.00		4.41								
13.00	F/EUT	E127DSWB	52.25	21.00	2.69		1.90		2.26		1.71		2.25		1.97		2.25		1.96		2.45		2.29		1.87		1.44		1.82		0.09		1.54		1.37		1.59		0.08				
13.00	F/EUT	E127DSWB	52.35	4.90	1.79		1.86		2.51		2.23		2.46		2.22		2.42		2.21		2.00		1.43		-0.26		-0.42		-0.32		-0.36		-1.97		-0.30		-0.50		-0.24		-0.55		-2.04
13.00	F/EUT	E127DSWB	52.53	13.42	1.00		0.66		0.16		-0.96		0.13		-0.59		0.08		-0.59		0.43		0.00		-0.80		-1.13		-0.86		-1.08		-3.01		-1.03		-1.23		-0.97		-1.28		-3.36
13.00	F/EUT	E127DSZA	55.95	-3.22	1.94		2.39		2.95		2.91		2.93		2.88		2.90		2.84		2.35		1.71		1.64		1.48		1.56		1.56		0.02		1.64		1.38		1.32		0.43		
13.00	F/EUT	E127DSZA	59.92	30.33	4.21		3.48		3.22		3.04		3.22		2.76		2.51		2.50		3.13		3.88		3.97		3.24		-1.09		3.19		3.22		3.25		3.16		-2.41				
13.00	F/EUT	E127DSZA	59.93	10.75	2.50		2.47		-0.28		-3.06		-0.28		-2.32		-0.30		-2.33		0.55		-1.45		1.34		0.64		1.28		0.69		-3.66		0.74		0.56		0.79		0.51		-4.81
13.00	F/EUT	E127DSZA	35.90	14.53	5.38		5.23		5.41		5.42		5.41		5.42		5.41		5.42		5.41		5.23		3.68		0.09		1.59		0.09		1.59		0.09		1.59		0.08				
13.00	F/EUT	E127DSZA	41.33	19.82	6.85		6.41		6.83		6.82		6.83		6.82		6.83		6.82		6.83		6.42		4.28		0.89		2.38		0.89		2.37		0.87		2.37		0.86				
13.00	F/EUT	E127DSZA	41.47	12.87	8.94		8.57		9.04		9.07		9.03		9.06		9.03		9.04		9.02		8.52		3.83		0.15		1.63		0.15		1.63		0.15		1.63		0.15				
13.00	F/EUT	E127DSZA	43.30	5.37	5.00		4.56		4.75		4.80		4.72		4.78		4.70		4.75		4.67		4.48		2.67		0.23		1.56		0.23		1.55		0.21		1.56		0.22		1.56		0.21
13.00	F/EUT	E127DSZA	46.22	6.15	6.06		5.42		5.76		5.66		5.71		5.65		5.66		5.63		5.37		3.71		1.32		2.63		1.33		2.55		1.25		2.61		1.32		2.61		1.26		
13.00	F/EUT	E127DSZA	47.28	11.42	5.61		5.50		5.25		5.64		5.26		5.58		5.28		5.25		5.29		5.28		3.61		1.01		2.35		1.01		2.24		0.88		2.28		0.91		2.29		0.88
13.00	F/EUT	E127DSZA	48.87	2.33	4.77		4.66		4.55		4.86		4.54		4.80		4.54		4.74		4.54		4.46		4.08		2.60		3.77		2.59		3.55		2.33		3.78		2.56		3.79		2.33
13.00	F/EUT	E127DSZA	50.73	7.10	4.48		4.44		4.18		4.54		4.18		4.48		4.17		4.40		4.17		4.23		3.68		1.88		3.10		1.87		2.61		1.32		2.97		1.69		2.99		1.35
13.00	F/EUT	E127DSZA	51.50	-0.17	4.43		4.90		5.54		5.00		5.93		5.95		5.94		5.90		5.93		5.45		5.04		-1.00		-1.06		-1.03		-1.31		-1.00		-0.97		-1.14		-0.86		
13.00	F/EUT	E127DSZA	47.28	11.42	5.24		5.52		6.00		5.93		5.95		5.94		5.90		5.93		5.45		5.04		-1.00		-1.06		-1.03		-1.31		-1.00		-0.97		-1.14		-0.86				
13.00	F/EUT	E127DSZA	47.50	19.05	4.90		5.19		5.54		5.51		5.54		5.58		5.54		5.57		5.21		4.87		-0.02		-0.14		-0.05		-0.11		-0.26		-0.09		-0.18		-0.06		-0.21		-0.36
13.00	F/EUT	E127DSZA	48.87	2.33	4.14		4.49		5.08		4.99		5.03		4.98		4.98		4.96		4.43	</																					

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																				
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
19.20	LUX	D33THP13	48.08	11.35		-9.81			-9.82			-9.84			-9.87			-9.88																							
19.20	LUX	D33THP13	48.13	16.22		-11.08			-11.11			-11.15			-11.19			-11.21																							
19.20	LUX	D33THP13	51.70	-9.52		-10.67			-10.66			-10.66			-10.68			-10.67																							
19.20	LUX	D33THP13	52.32	13.25		-10.10			-10.11			-10.13			-10.15			-10.16																							
19.20	LUX	D33THP13	53.20	-6.15		-9.59			-9.59			-9.59			-9.60			-9.60																							
19.20	LUX	D33THP13	55.43	12.34		-10.54			-10.55			-10.57			-10.60			-10.60																							
19.20	LUX	D33THP13	55.92	-3.17		-9.56			-9.56			-9.56			-9.57			-9.57																							
19.20	LUX	D33THP13	57.50	-4.25		-9.54			-9.53			-9.53			-9.55			-9.54																							
19.20	LUX	D33THP13	59.20	18.05		-18.19			-18.29			-18.40			-18.50			-18.54																							
19.20	LUX	D33THP13	59.56	10.45		-10.34			-10.35			-10.37			-10.40			-10.40																							
19.20	LUX	D33THP13	60.20	25.00		-28.08			-28.20			-28.31			-28.42			-28.46																							
19.20	LUX	D33THP13	60.25	5.20		-11.38			-11.38			-11.38			-11.39			-11.39																							
19.20	LUX	D33THP14	36.12	-5.36		-10.89			-10.89			-10.91			-10.96			-10.98																							
19.20	LUX	D33THP14	37.10	-8.68		-13.01			-13.02			-13.04			-13.09			-13.10																							
19.20	LUX	D33THP14	37.36	-0.59		-10.45			-10.46			-10.48			-10.53			-10.57																							
19.20	LUX	D33THP14	40.25	-3.43		-8.73			-8.73			-8.75			-8.80			-8.81																							
19.20	LUX	D33THP14	41.36	2.18		-8.44			-8.44			-8.47			-8.51			-8.53																							
19.20	LUX	D33THP14	42.85	-8.55		-9.56			-9.57			-9.59			-9.64			-9.65																							
19.20	LUX	D33THP14	43.25	5.39		-6.90			-6.92			-6.96			-7.01			-7.03																							
19.20	LUX	D33THP14	45.45	9.24		-7.64			-7.66			-7.71			-7.77			-7.80																							
19.20	LUX	D33THP14	48.08	11.35		-6.70			-6.73			-6.77			-6.82			-6.84																							
19.20	LUX	D33THP14	48.13	16.22		-7.89			-7.93			-7.99			-8.06			-8.08																							
19.20	LUX	D33THP14	51.70	-9.52		-7.11			-7.12			-7.14			-7.19			-7.20																							
19.20	LUX	D33THP14	52.32	13.25		-6.53			-6.55			-6.58			-6.63			-6.64																							
19.20	LUX	D33THP14	53.20	-6.15		-6.06			-6.06			-6.08			-6.13			-6.14																							
19.20	LUX	D33THP14	55.43	12.34		-6.58			-6.59			-6.62			-6.66			-6.68																							
19.20	LUX	D33THP14	55.92	-3.17		-5.95			-5.95			-5.98			-6.02			-6.03																							
19.20	LUX	D33THP14	57.50	-4.25		-5.77			-5.77			-5.80			-5.85			-5.86																							
19.20	LUX	D33THP14	59.20	18.05		-10.65			-10.73			-10.81			-10.90			-10.93																							
19.20	LUX	D33THP14	59.56	10.45		-6.36			-6.37			-6.40			-6.44			-6.45																							
19.20	LUX	D33THP14	60.20	25.00		-19.88			-19.98			-20.08			-20.18			-20.22																							
19.20	LUX	D33THP14	60.25	5.20		-7.64			-7.65			-7.67			-7.71			-7.72																							
19.20	LUX	D33THP1C	36.12	-5.36		3.29			3.28			3.25			3.17			3.14																							
19.20	LUX	D33THP1C	37.10	-8.68		1.06			1.06			1.02			0.94			0.91																							
19.20	LUX	D33THP1C	37.36	-0.59		3.79			3.79			3.75			3.68			3.63																							
19.20	LUX	D33THP1C	40.25	-3.43		5.46			5.46			5.42			5.35			5.32																							
19.20	LUX	D33THP1C	41.36	2.18		5.78			5.78			5.74			5.67			5.64																							
19.20	LUX	D33THP1C	42.85	-8.55		4.51			4.51			4.47			4.39			4.36																							
19.20	LUX	D33THP1C	43.25	5.39		7.50			7.49			7.46			7.38			7.35																							
19.20	LUX	D33THP1C	45.45	9.24		6.84			6.83			6.79			6.71			6.67																							
19.20	LUX	D33THP1C	48.08	11.35		7.75			7.74			7.70			7.62			7.59																							
19.20	LUX	D33THP1C	48.13	16.22		6.80			6.79			6.74			6.66			6.63																							
19.20	LUX	D33THP1C	51.70	-9.52		6.99			6.98			6.94			6.86			6.83																							
19.20	LUX	D33THP1C	52.32	13.25		7.75			7.74			7.70			7.63			7.60																							
19.20	LUX	D33THP1C	53.20	-6.15		8.06			8.06			8.02			7.94			7.92																							
19.20	LUX	D33THP1C	55.43	12.34		7.57			7.56			7.52			7.45			7.42																							
19.20	LUX	D33THP1C	55.92	-3.17		8.18			8.18			8.14			8.06			8.04																							
19.20	LUX	D33THP1C	57.50	-4.25		8.32			8.32			8.28			8.20			8.17																							
19.20	LUX	D33THP1C	59.20	18.05		3.74			3.67			3.58			3.48			3.44																							
19.20	LUX	D33THP1C	59.56	10.45		7.85			7.84			7.80			7.73			7.71																							
19.20	LUX	D33THP1C	60.20	25.00		5.41			5.51			5.61			5.72			5.76																							
19.20	LUX	D33THP1C	60.25	5.20		6.52			6.51			6.48			6.40			6.38																							
19.20	LUX	D33THP1I	36.12	-5.																																					

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																				
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
19.20	LUX	D33THP2C	48.08	11.35																		4.26			4.31			4.17			4.10			4.22							
19.20	LUX	D33THP2C	51.70	-9.52																		4.28			4.36			4.18			4.12			4.26							
19.20	LUX	D33THP2C	52.32	13.25																		4.72			4.93			4.79			3.13			3.08							
19.20	LUX	D33THP2C	53.20	-6.15																		5.24			5.32			5.13			5.07			5.20							
19.20	LUX	D33THP2C	55.43	12.34																		4.62			4.81			4.66			2.20			2.09							
19.20	LUX	D33THP2C	55.92	-3.17																		5.35			5.42			5.24			5.19			5.30							
19.20	LUX	D33THP2C	57.50	-4.25																		5.58			5.66			5.47			5.41			5.53							
19.20	LUX	D33THP2C	59.20	18.05																		1.20			1.75			1.67			0.85			0.83							
19.20	LUX	D33THP2C	59.56	10.45																		4.44			4.58			4.42			1.47			1.32							
19.20	LUX	D33THP2C	60.20	25.00																		6.26			5.82			5.89			5.90			5.85							
19.20	LUX	D33THP2C	60.25	5.20																		3.58			3.66			3.48			0.75			0.62							
19.20	LUX	D33THP2I	36.12	-5.36																		-11.90			-11.84			-11.99			-12.02			-11.90							
19.20	LUX	D33THP2I	37.10	-8.68																		-13.90			-13.83			-14.01			-14.05			-13.91							
19.20	LUX	D33THP2I	37.36	-0.59																		-11.60			-11.57			-11.70			-11.75			-11.64							
19.20	LUX	D33THP2I	40.25	-3.43																		9.73			9.66			9.81			-9.85			-9.73							
19.20	LUX	D33THP2I	41.36	2.18																		9.38			9.31			9.47			9.51			9.40							
19.20	LUX	D33THP2I	42.85	-8.55																		-10.41			-10.34			-10.53			-10.57			-10.43							
19.20	LUX	D33THP2I	43.25	5.39																		7.79			7.75			7.90			7.96			7.85							
19.20	LUX	D33THP2I	45.45	9.24																		8.21			8.14			8.30			8.34			8.23							
19.20	LUX	D33THP2I	48.08	11.35																		8.12			8.07			8.21			8.26			8.15							
19.20	LUX	D33THP2I	51.70	-9.52																		8.00			7.91			8.11			8.16			8.04							
19.20	LUX	D33THP2I	52.32	13.25																		7.66			7.44			7.58			8.67			8.67							
19.20	LUX	D33THP2I	53.20	-6.15																		7.05			6.96			7.16			7.22			7.10							
19.20	LUX	D33THP2I	55.43	12.34																		7.67			7.47			7.62			9.32			9.37							
19.20	LUX	D33THP2I	55.92	-3.17																		6.93			6.85			7.04			7.09			7.01							
19.20	LUX	D33THP2I	57.50	-4.25																		6.68			6.60			6.79			6.85			6.76							
19.20	LUX	D33THP2I	59.20	18.05																		-10.10			9.37			9.47			-10.16			-10.15							
19.20	LUX	D33THP2I	59.56	10.45																		7.74			7.60			7.77			9.86			9.95							
19.20	LUX	D33THP2I	60.20	25.00																		17.40			16.80			16.89			16.91			16.85							
19.20	LUX	D33THP2I	60.25	5.20																		-8.71			8.64			8.82			-10.70			-10.78							
19.20	LUX	D33TVN13	36.12	-5.36	-15.20		-13.71		-13.69												-13.70			-13.70																	
19.20	LUX	D33TVN13	37.10	-8.68	-16.74		-15.04		-15.02												-15.03			-15.02																	
19.20	LUX	D33TVN13	37.36	-0.59	-15.30		-13.87		-13.85												-13.86			-13.86																	
19.20	LUX	D33TVN13	40.25	-3.43	-13.17		-11.67		-11.65												-11.65			-11.65																	
19.20	LUX	D33TVN13	41.36	2.18	-10.40		-8.88		-8.87												-8.87			-8.87																	
19.20	LUX	D33TVN13	42.85	-8.55	-15.94		-14.19		-14.17												-14.17			-14.16																	
19.20	LUX	D33TVN13	43.25	5.39	-10.24		-8.81		-8.80												-8.80			-8.80																	
19.20	LUX	D33TVN13	45.45	9.24	-11.09		-9.67		-9.64												-9.61			-9.60																	
19.20	LUX	D33TVN13	48.08	11.35	-10.18		-8.72		-8.70												-8.70			-8.70																	
19.20	LUX	D33TVN13	48.13	16.22	-13.36		-12.03		-12.02												-12.03			-12.03																	
19.20	LUX	D33TVN13	52.32	13.25	-10.85		-9.46		-9.46												-9.47			-9.47																	
19.20	LUX	D33TVN13	53.20	-6.15	-12.47		-10.78		-10.76												-10.76			-10.75																	
19.20	LUX	D33TVN13	55.43	12.34	-12.42		-11.03		-11.04												-11.05			-11.06																	
19.20	LUX	D33TVN13	55.92	-3.17	-11.78		-10.11		-10.08												-10.07			-10.05																	
19.20	LUX	D33TVN13	57.50	-4.25	-12.89		-11.17		-11.15												-11.15			-11.14																	
19.20	LUX	D33TVN13	59.20	18.05	-24.51		-24.36		-24.47												-24.57			-24.63																	
19.20	LUX	D33TVN13	59.56	10.45	-14.49		-13.06		-13.06												-13.07			-13.07																	
19.20	LUX	D33TVN13	60.25	5.20	-16.07		-14.44		-14.42												-14.42			-14.42																	
19.20	LUX	D33TVN14	36.12	-5.36	-12.14		-10.92		-10.92												-10.95			-10.97																	
19.20	LUX	D33TVN14	37.10	-8.68	-13.42		-12.08		-12.08												-12.11			-12.13																	
19.20	LUX	D33TVN14	37.36	-0.59	-12.29		-11.11		-11.10												-11.14			-11.16																	
19.20	LUX	D33TVN14	40.25	-3.43	-9.94		-8.76		-8.76												-8.79			-8.80																	
19.20	LUX	D33TVN14	41.36	2.18																																					

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																				
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
19.20	LUX	D33TVP13	45.45	9.24			-11.28			-11.24			-11.21			-11.19			-10.97																						
19.20	LUX	D33TVP13	48.08	11.35			-9.54			-9.52			-9.51			-9.51			-9.34																						
19.20	LUX	D33TVP13	48.13	16.22			-12.18			-12.16			-12.16			-12.17			-12.01																						
19.20	LUX	D33TVP13	51.70	-9.52			-16.03			-16.01			-16.00			-16.00			-15.91																						
19.20	LUX	D33TVP13	52.32	13.25			-10.19			-10.18			-10.19			-10.20			-10.03																						
19.20	LUX	D33TVP13	53.20	-6.15			-10.21			-10.19			-10.18			-10.18			-10.10																						
19.20	LUX	D33TVP13	55.43	12.34			-11.45			-11.45			-11.46			-11.48			-11.29																						
19.20	LUX	D33TVP13	55.92	-3.17			-9.63			-9.60			-9.58			-9.56			-9.49																						
19.20	LUX	D33TVP13	57.50	-4.25			-10.81			-10.79			-10.78			-10.78			-10.70																						
19.20	LUX	D33TVP13	59.20	18.05			-24.69			-24.79			-24.89			-24.99			-24.25																						
19.20	LUX	D33TVP13	59.56	10.45			-13.87			-13.87			-13.87			-13.89			-13.73																						
19.20	LUX	D33TVP13	60.25	5.20			-13.90			-13.88			-13.87			-13.87			-13.81																						
19.20	LUX	D33TVP14	36.12	-5.36			-10.19			-10.18			-10.20			-10.23			-10.16																						
19.20	LUX	D33TVP14	37.10	-8.68			-12.18			-12.17			-12.19			-12.22			-12.15																						
19.20	LUX	D33TVP14	37.36	-0.59			-9.94			-9.94			-9.95			-9.99			-9.89																						
19.20	LUX	D33TVP14	40.25	-3.43			-7.99			-7.98			-8.00			-8.03			-7.96																						
19.20	LUX	D33TVP14	41.36	2.18			-6.76			-6.75			-6.77			-6.80			-6.71																						
19.20	LUX	D33TVP14	42.85	-8.55			-11.33			-11.32			-11.34			-11.37			-11.28																						
19.20	LUX	D33TVP14	43.25	5.39			-5.85			-5.85			-5.86			-5.89			-5.72																						
19.20	LUX	D33TVP14	45.45	9.24			-8.23			-8.20			-8.18			-8.18			-7.93																						
19.20	LUX	D33TVP14	48.08	11.35			-6.44			-6.43			-6.44			-6.47			-6.27																						
19.20	LUX	D33TVP14	48.13	16.22			-8.99			-8.98			-9.00			-9.03			-8.75																						
19.20	LUX	D33TVP14	51.70	-9.52			-12.47			-12.46			-12.48			-12.51			-12.40																						
19.20	LUX	D33TVP14	52.32	13.25			-6.62			-6.62			-6.64			-6.67			-6.53																						
19.20	LUX	D33TVP14	53.20	-6.15			-6.67			-6.66			-6.68			-6.71			-6.61																						
19.20	LUX	D33TVP14	55.43	12.34			-7.49			-7.49			-7.51			-7.54			-7.42																						
19.20	LUX	D33TVP14	55.92	-3.17			-5.98			-5.97			-5.98			-6.01			-5.92																						
19.20	LUX	D33TVP14	57.50	-4.25			-7.04			-7.03			-7.05			-7.08			-6.97																						
19.20	LUX	D33TVP14	59.20	18.05			-17.14			-17.21			-17.29			-17.38			-16.81																						
19.20	LUX	D33TVP14	59.56	10.45			-9.88			-9.88			-9.90			-9.92			-9.80																						
19.20	LUX	D33TVP14	60.25	5.20			-10.16			-10.15			-10.17			-10.19			-10.10																						
19.20	LUX	D33TVP1C	36.12	-5.36			3.98			3.98			3.93			3.86			3.87																						
19.20	LUX	D33TVP1C	37.10	-8.68			1.89			1.89			1.83			1.75			1.76																						
19.20	LUX	D33TVP1C	37.36	-0.59			4.30			4.29			4.24			4.17			4.19																						
19.20	LUX	D33TVP1C	40.25	-3.43			6.19			6.19			6.14			6.08			6.08																						
19.20	LUX	D33TVP1C	41.36	2.18			7.45			7.45			7.40			7.33			7.34																						
19.20	LUX	D33TVP1C	42.85	-8.55			2.73			2.73			2.67			2.60			2.61																						
19.20	LUX	D33TVP1C	43.25	5.39			8.54			8.53			8.49			8.42			8.45																						
19.20	LUX	D33TVP1C	45.45	9.24			6.24			6.27			6.25			6.20			6.27																						
19.20	LUX	D33TVP1C	48.08	11.35			7.99			7.99			7.94			7.87			7.92																						
19.20	LUX	D33TVP1C	48.13	16.22			5.67			5.67			5.62			5.56			5.60																						
19.20	LUX	D33TVP1C	51.70	-9.52			1.61			1.61			1.55			1.48			1.49																						
19.20	LUX	D33TVP1C	52.32	13.25			7.64			7.64			7.59			7.52			7.56																						
19.20	LUX	D33TVP1C	53.20	-6.15			7.43			7.43			7.38			7.31			7.32																						
19.20	LUX	D33TVP1C	55.43	12.34			6.65			6.64			6.59			6.52			6.57																						
19.20	LUX	D33TVP1C	55.92	-3.17			8.14			8.14			8.09			8.01			8.03																						
19.20	LUX	D33TVP1C	57.50	-4.25			7.03			7.03			6.98			6.91			6.92																						
19.20	LUX	D33TVP1C	59.20	18.05			-2.75			-2.83			-2.92			-3.02			-2.50																						
19.20	LUX	D33TVP1C	59.56	10.45			4.31			4.31			4.26			4.19			4.23																						
19.20	LUX	D33TVP1C	60.25	5.20			3.99			3.98			3.94			3.87			3.88																						
19.20	LUX	D33TVP1II	36.12	-5.36			-8.37			-8.38			-8.42			-8.48			-8.43																						
19.20	LUX	D33TVP1II	37.10	-8.68			-10.40			-10.40			-10.45			-10.51			-10.47																						
19.20	LUX	D33TVP1II	37.36	-0.59																																					

Orbital Position ("E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																																																																																																																																																																																																																																																																																																																																																				
			Latitude ("N)	Longitude ("E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40																																																																																																																																																																																																																																																																																																																													
26.00	ARS	REGBS124	24.65	46.77	12.88	12.88	12.88	12.88	12.88	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.49																																																																																																																																																																																																																																																																																																																																																			
26.00	ARS	REGBS124	25.83	51.60	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.03																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS124	29.33	48.00	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.17																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS124	30.05	31.25	18.61	18.61	18.61	18.61	18.62	18.62	18.62	18.62	18.62	18.62	18.62	18.62	18.62	18.62	18.62	18.62	18.62	18.62	18.49																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS124	31.95	35.93	16.43	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	19.15																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS124	32.88	13.20	17.67	17.65	17.67	17.65	17.65	17.65	17.65	17.65	17.65	17.65	17.65	17.65	17.65	17.65	17.65	17.65	17.65	17.65	19.14																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS124	33.33	44.43	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	10.62	9.82																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS124	33.50	36.32	14.61	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.62	14.59																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS124	34.03	-6.75	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.23																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS124	36.83	3.00	-0.92	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-1.33																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS124	36.83	10.00	2.96	2.96	2.96	2.96	2.93	2.87	2.87	2.80	2.74	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.59																																																																																																																																																																																																																																																																																																																																																			
26.00	ARS	REGBS125	2.03	45.35	-0.98	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.16	-1.26																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS125	12.78	45.03	22.80	22.57	22.57	22.57	22.57	22.55	22.53	22.52	22.50	22.48	22.47																																																																																																																																																																																																																																																																																																																																																										
26.00	ARS	REGBS125	15.55	32.53	20.83	20.70	20.70	20.70	20.70	20.69	20.68	20.67	20.66	20.65	20.64																																																																																																																																																																																																																																																																																																																																																										
26.00	ARS	REGBS125	18.15	-15.97	24.92	24.57	24.57	24.57	24.57	24.55	24.51	24.48	24.45	24.42	24.40																																																																																																																																																																																																																																																																																																																																																										
26.00	ARS	REGBS125	23.62	58.58	10.21	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18																																																																																																																																																																																																																																																																																																																																																			
26.00	ARS	REGBS125	24.65	46.77	13.32	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.60	12.60																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS125	25.83	51.60	8.15	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS125	29.33	48.00	9.44	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40	9.40																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS125	30.05	31.25	18.01	17.87	17.87	17.87	17.87	17.86	17.86	17.86	17.86	17.86	17.86	17.86	17.86	17.86	17.86	17.86	17.86	17.84																																																																																																																																																																																																																																																																																																																																																			
26.00	ARS	REGBS125	31.95	35.93	15.70	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.59																																																																																																																																																																																																																																																																																																																																																			
26.00	ARS	REGBS125	32.88	13.20	16.96	16.82	16.84	16.83	16.84	16.84	16.83	16.84	16.83	16.84	16.83	16.84	16.83	16.84	16.83	16.84	16.83	16.83																																																																																																																																																																																																																																																																																																																																																			
26.00	ARS	REGBS125	33.33	44.43	9.71	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS125	33.50	36.32	13.84	13.77	13.77	13.77	13.77	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.75																																																																																																																																																																																																																																																																																																																																																			
26.00	ARS	REGBS125	34.03	-6.75	1.96	1.64	1.64	1.64	1.64	1.58	1.51	1.45	1.39	1.39	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.26																																																																																																																																																																																																																																																																																																																																																			
26.00	ARS	REGBS125	36.83	3.00	-0.60	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-0.93	-1.30																																																																																																																																																																																																																																																																																																																																																		
26.00	ARS	REGBS125	36.83	10.00	3.26	2.93	2.94	2.94	2.88	2.81	2.75	2.69	2.63	2.57	2.51	2.45	2.39	2.33	2.27	2.21	2.15	2.09	2.03	1.97	1.91	1.85	1.79	1.73	1.67	1.61	1.55	1.49	1.43	1.37	1.31	1.25	1.19	1.13	1.07	1.01	0.95	0.89	0.83	0.77	0.71	0.65	0.59	0.53	0.47	0.41	0.35	0.29	0.23	0.17	0.11	0.05	-0.03	-0.09	-0.15	-0.21	-0.27	-0.33	-0.39	-0.45	-0.51	-0.56	-0.62	-0.68	-0.74	-0.80	-0.86	-0.92	-0.98	-0.10	-0.04	-0.08	-0.12	-0.16	-0.20	-0.24	-0.28	-0.32	-0.36	-0.40	-0.44	-0.48	-0.52	-0.56	-0.60	-0.64	-0.68	-0.72	-0.76	-0.80	-0.84	-0.88	-0.92	-0.96	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50	-0.54	-0.58	-0.62	-0.66	-0.70	-0.74	-0.78	-0.82	-0.86	-0.90	-0.94	-0.98	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50	-0.54	-0.58	-0.62	-0.66	-0.70	-0.74	-0.78	-0.82	-0.86	-0.90	-0.94	-0.98	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50	-0.54	-0.58	-0.62	-0.66	-0.70	-0.74	-0.78	-0.82	-0.86	-0.90	-0.94	-0.98	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50	-0.54	-0.58	-0.62	-0.66	-0.70	-0.74	-0.78	-0.82	-0.86	-0.90	-0.94	-0.98	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50	-0.54	-0.58	-0.62	-0.66	-0.70	-0.74	-0.78	-0.82	-0.86	-0.90	-0.94	-0.98	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50	-0.54	-0.58	-0.62	-0.66	-0.70	-0.74	-0.78	-0.82	-0.86	-0.90	-0.94	-0.98	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50	-0.54	-0.58	-0.62	-0.66	-0.70	-0.74	-0.78	-0.82	-0.86	-0.90	-0.94	-0.98	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50	-0.54	-0.58	-0.62	-0.66	-0.70	-0.74	-0.78	-0.82	-0.86	-0.90	-0.94	-0.98	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50	-0.54	-0.58	-0.62	-0.66	-0.70	-0.74	-0.78	-0.82	-0.86	-0.90	-0.94	-0.98	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50	-0.54	-0.58	-0.62	-0.66	-0.70	-0.74	-0.78	-0.82	-0.86	-0.90	-0.94	-0.98	-0.02	-0.06	-0.10	-0.14	-0.18	-0.22	-0.26	-0.30	-0.34	-0.38	-0.42	-0.46	-0.50

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																				
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
26.00	ARS	REGBS134	2.03	45.35																	-5.67	-5.63	-5.59	-5.59	-5.59	-5.59	-5.59	-5.59	-5.60	-5.58	-4.72										
26.00	ARS	REGBS134	12.78	45.03																	-0.48	-0.48	-0.48	-0.48	-0.48	-0.48	-0.48	-0.48	-0.48	-0.48	2.13										
26.00	ARS	REGBS134	15.55	32.53																	3.00	3.00	3.01	3.01	3.01	3.01	3.01	3.01	3.00	3.01	5.78										
26.00	ARS	REGBS134	18.15	-15.97																	21.87	21.93	22.00	22.00	22.00	22.00	22.00	22.00	21.76	22.04	22.52										
26.00	ARS	REGBS134	23.62	58.58																	2.47	2.95	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	2.36										
26.00	ARS	REGBS134	24.65	46.77																	5.04	5.36	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.90										
26.00	ARS	REGBS134	25.83	51.60																	2.28	2.76	3.31	3.31	3.31	3.31	3.31	3.31	3.31	3.31	2.51										
26.00	ARS	REGBS134	29.33	48.00																	3.98	4.85	5.94	5.94	5.94	5.94	5.94	5.94	5.94	5.94	5.23										
26.00	ARS	REGBS134	30.05	31.25																	8.58	8.64	8.70	8.70	8.70	8.70	8.70	8.70	8.69	8.70	8.84										
26.00	ARS	REGBS134	31.95	35.93																	6.54	6.80	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.17										
26.00	ARS	REGBS134	32.88	13.20																	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.29										
26.00	ARS	REGBS134	33.33	44.43																	3.27	3.93	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	5.13										
26.00	ARS	REGBS134	33.50	36.32																	6.04	6.43	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.97										
26.00	ARS	REGBS134	34.03	-6.75																	-1.22	-1.22	-1.22	-1.22	-1.21	-1.22	-1.21	-1.22	-1.19	-1.10	-0.76										
26.00	ARS	REGBS134	36.83	3.00																	-3.77	-3.77	-3.77	-3.77	-3.77	-3.77	-3.77	-3.74	-3.66	-3.32											
26.00	ARS	REGBS134	36.83	10.00																	-1.14	-1.15	-1.14	-1.14	-1.14	-1.14	-1.14	-1.12	-1.06	-0.82											
26.00	ARS	REGBS137	2.03	45.35																	-5.66	-6.40	-6.31	-6.30	-6.30	-6.28	-6.28	-6.27	-6.26	-6.24											
26.00	ARS	REGBS137	12.78	45.03																	-2.53	-2.63	-2.63	-2.63	-2.63	-2.63	-2.63	-2.63	-2.63	-2.63											
26.00	ARS	REGBS137	15.55	32.53																	0.81	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76											
26.00	ARS	REGBS137	18.15	-15.97																	21.31	21.02	21.15	21.17	21.18	21.23	21.24	21.20	21.21	21.26											
26.00	ARS	REGBS137	23.62	58.58																	3.97	2.42	4.39	4.39	4.39	4.39	4.39	4.39	4.39	4.39											
26.00	ARS	REGBS137	24.65	46.77																	6.25	5.04	6.28	6.28	6.28	6.28	6.28	6.28	6.28	6.28											
26.00	ARS	REGBS137	25.83	51.60																	1.60	1.60	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30										
26.00	ARS	REGBS137	29.33	48.00																	4.10	3.21	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.58										
26.00	ARS	REGBS137	30.05	31.25																	11.31	9.10	9.32	9.32	9.32	9.33	9.33	9.33	9.33	9.33											
26.00	ARS	REGBS137	31.95	35.93																	8.66	6.78	7.80	7.80	7.80	7.80	7.80	7.80	7.81	7.81											
26.00	ARS	REGBS137	32.88	13.20																	5.11	2.19	2.20	2.20	2.20	2.20	2.20	2.20	2.19	2.20											
26.00	ARS	REGBS137	33.33	44.43																	3.48	2.53	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.81											
26.00	ARS	REGBS137	33.50	36.32																	7.63	6.03	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54											
26.00	ARS	REGBS137	34.03	-6.75																	-1.98	-2.02	-2.12	-2.08	-2.04	-1.94	-1.90	-1.79	-1.75	-1.64											
26.00	ARS	REGBS137	36.83	3.00																	4.53	4.57	4.67	4.63	4.59	4.49	4.49	4.45	4.35	4.30											
26.00	ARS	REGBS137	36.83	10.00																	-1.06	-1.56	-1.61	-1.61	-1.56	-1.49	-1.44	-1.38	-1.32	-1.26											
26.00	ARS	REGBS138	2.03	45.35																	6.34	6.31	6.27	6.26	6.25	6.24	6.23	6.24	6.21	5.15											
26.00	ARS	REGBS138	12.78	45.03																	-1.78	-1.78	-1.78	-1.78	-1.78	-1.78	-1.78	-1.78	-1.78	0.93											
26.00	ARS	REGBS138	15.55	32.53																	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66											
26.00	ARS	REGBS138	18.15	-15.97																	21.08	21.12	21.17	21.20	21.23	21.26	21.29	21.29	21.29	21.34											
26.00	ARS	REGBS138	23.62	58.58																	2.10	2.73	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48											
26.00	ARS	REGBS138	24.65	46.77																	4.70	5.11	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.82											
26.00	ARS	REGBS138	25.83	51.60																	1.68	2.27	2.96	2.96	2.96	2.96	2.96	2.96	2.96	2.96											
26.00	ARS	REGBS138	29.33	48.00																	3.34	4.41	5.83	5.83	5.83	5.83	5.83	5.83	5.83	5.83											
26.00	ARS	REGBS138	30.05	31.25																	8.42	8.50	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58											
26.00	ARS	REGBS138	31.95	35.93																	6.28	6.62	6.99	6.99	6.99	6.99	6.99	6.99	6.99	6.99											
26.00	ARS	REGBS138	32.88	13.20																	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.29											
26.00	ARS	REGBS138	33.33	44.43																	2.63	3.42	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40											
26.00	ARS	REGBS138	33.50	36.32																	5.69	6.19	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.92											
26.00	ARS	REGBS138	34.03	-6.75																	-1.99	-2.06	-2.12	-2.06	-1.99	-1.91	-1.84	-1.77	-1.70	-1.29											
26.00	ARS	REGBS138	36.83	3.00																	-4.54	-4.62	-4.68	-4.61	-4.54	-4.47	-4.40	-4.32	-4.25	-3.84											
26.00	ARS	REGBS138	36.83	10.00																	-1.73	-1.78	-1.83	-1.78	-1.72	-1.67	-1.61	-1.56	-1.50	-1.20											
26.00	ARS	REGBS141	2.03	45.35																	0.86	0.26	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.38											
26.00	ARS	REGBS141	12.78	45.03																	3.44	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38											
26.00	ARS	REGBS141	15.55	32.53																	6.80	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77											
26.00	ARS	REGBS141	18.15	-15.97																	28.03	27.80	27.95	27.97	27.95	27.97	27.95	27.95	27.91	27.91											
26.00	ARS	REGBS141	23.62	58.58																	11.46	10.19	12.67	12.67	12.67	12.67	12.6														

Orbital Position ("E")	Admin. Symbol	Beam Identifi-cation	Test Point		EPM (dB) / Channel Number																																												
			Latitude ("N")	Longitude ("E")	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40					
26.00	ARS	REGBS141	33.33	44.43																																													
26.00	ARS	REGBS141	33.50	36.32																																													
26.00	ARS	REGBS141	34.03	-6.75																																													
26.00	ARS	REGBS141	36.83	3.00																																													
26.00	ARS	REGBS141	36.83	10.00																																													
26.00	ARS	REGBS142	2.03	45.35																																													
26.00	ARS	REGBS142	12.78	45.03																																													
26.00	ARS	REGBS142	15.55	32.53																																													
26.00	ARS	REGBS142	18.15	-15.97																																													
26.00	ARS	REGBS142	23.62	58.58																																													
26.00	ARS	REGBS142	24.65	46.77																																													
26.00	ARS	REGBS142	25.83	51.60																																													
26.00	ARS	REGBS142	29.33	48.00																																													
26.00	ARS	REGBS142	30.05	31.25																																													
26.00	ARS	REGBS142	31.95	35.93																																													
26.00	ARS	REGBS142	32.88	13.20																																													
26.00	ARS	REGBS142	33.33	44.43																																													
26.00	ARS	REGBS145	2.03	45.35																																													
26.00	ARS	REGBS145	12.78	45.03																																													
26.00	ARS	REGBS145	15.55	32.53																																													
26.00	ARS	REGBS145	18.15	-15.97																																													
26.00	ARS	REGBS145	23.62	58.58																																													
26.00	ARS	REGBS145	24.65	46.77																																													
26.00	ARS	REGBS145	25.83	51.60																																													
26.00	ARS	REGBS145	29.33	48.00																																													
26.00	ARS	REGBS145	30.05	31.25																																													
26.00	ARS	REGBS145	31.95	35.93																																													
26.00	ARS	REGBS145	32.88	13.20																																													
26.00	ARS	REGBS145	33.33	44.43																																													
26.00	ARS	REGBS146	2.03	45.35																																													
26.00	ARS	REGBS146	12.78	45.03																																													
26.00	ARS	REGBS146	15.55	32.53																																													
26.00	ARS	REGBS146	18.15	-15.97																																													
26.00	ARS	REGBS146	23.62	58.58																																													
26.00	ARS	REGBS146	24.65	46.77																																													
26.00	ARS	REGBS146	25.83	51.60																																													
26.00	ARS	REGBS146	29.33	48.00																																													
26.00	ARS	REGBS146	30.05	31.25																																													
26.00	ARS	REGBS146	31.95	35.93																																													
26.00	ARS	REGBS146	32.88	13.20																																													
26.00	ARS	REGBS146	33.33	44.43																																													
26.00	ARS	REGBS146	33.50	36.32																																													
26.00	ARS	REGBS146	34.03	-6.75																																													
26.00	ARS	REGBS146	36.83	3.00																																													
26.00	ARS	REGBS146	36.83	10.00																																													
28.20	LUX	D3128H1	27.50	-16.00	-21.36	-22.19	-22.14	-22.11	-22.02	-22.04	-22.05	-22.06	-22.08	-22.0																																			

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																				
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
28.20	LUX	D3128H11	42.85	-8.55	-1.82	-2.79	-2.71	-2.75	-2.71	-2.71	-2.67	-2.74	-2.71	-2.79	-2.40	-2.01																									
28.20	LUX	D3128H11	43.25	5.39	-6.58	-7.22	-7.24	-7.24	-7.29	-7.26	-7.32	-7.34	-7.40	-7.39	-5.55	-5.13																									
28.20	LUX	D3128H11	48.08	11.35	0.19	-3.13	-3.20	-3.19	-3.26	-3.25	-3.32	-3.32	-3.37	-3.34	-0.22	6.13																									
28.20	LUX	D3128H11	48.13	16.22	3.29	-2.25	-2.25	-2.26	-2.26	-2.28	-2.27	-2.29	-2.29	-2.30	-0.22	7.96																									
28.20	LUX	D3128H11	50.50	30.50	0.77	-0.81	-0.89	-0.96	-1.04	-1.10	-1.18	-1.25	-1.31	-1.32	-1.28	2.13																									
28.20	LUX	D3128H11	51.70	-9.52	3.62	2.29	2.56	2.23	2.49	2.17	2.42	2.10	2.35	2.05	3.28	4.47																									
28.20	LUX	D3128H11	52.32	13.25	3.70	1.07	0.95	1.05	0.92	1.02	0.90	0.99	0.87	0.97	2.34	6.03																									
28.20	LUX	D3128H11	55.43	12.34	3.77	2.56	2.40	2.51	2.35	2.47	2.31	2.42	2.26	2.39	3.39	5.74																									
28.20	LUX	D3128H11	55.76	37.68	0.78	-1.67	-1.76	-1.84	-1.93	-2.00	-2.09	-2.17	-2.24	-2.26	-0.96	-1.11																									
28.20	LUX	D3128H11	57.50	-4.25	2.70	1.19	1.45	1.15	1.41	1.11	1.36	1.06	1.31	1.02	2.20	3.81																									
28.20	LUX	D3128H11	59.56	10.45	4.39	3.09	3.29	3.04	3.23	2.99	3.18	2.93	3.12	2.89	3.97	5.14																									
28.20	LUX	D3128H11	60.20	25.00	-3.00	-5.36	5.43	5.49	-5.56	-5.61	-5.67	-5.72	-5.78	-5.77	-1.76	-0.32																									
28.20	LUX	D3128H11	60.25	5.20	4.87	3.78	3.75	3.72	3.68	3.67	3.63	3.61	3.57	3.56	4.40	5.94																									
28.20	LUX	D3128H11	65.60	22.17	-1.06	-3.14	-3.21	-3.26	-3.32	-3.37	-3.44	-3.49	-3.54	-3.54	-2.36	-3.73																									
28.20	LUX	D3128H14	27.50	-16.00	-4.97	-6.41	-6.38	-6.38	-6.39	-6.34	-6.36	-6.39	-6.41	-6.46	-6.23	-5.82																									
28.20	LUX	D3128H14	37.10	-8.68	3.87	7.76	7.73	7.70	7.65	7.64	7.59	7.54	7.50	7.47	8.32	8.52																									
28.20	LUX	D3128H14	37.36	-0.59	3.99	2.54	2.57	2.57	2.56	2.60	2.58	2.55	2.53	2.48	2.74	3.20																									
28.20	LUX	D3128H14	40.25	-3.43	9.49	8.15	8.19	8.15	8.16	8.15	8.09	8.10	8.03	8.61	9.14																										
28.20	LUX	D3128H14	40.85	14.27	9.78	3.53	3.47	3.36	3.31	3.20	3.15	3.04	3.01	3.04	11.38																										
28.20	LUX	D3128H14	41.36	2.18	5.36	4.53	4.45	4.45	4.35	4.38	4.27	4.26	4.17	4.19	6.60	7.23																									
28.20	LUX	D3128H14	42.85	-8.55	9.48	8.71	8.74	8.59	8.61	8.47	8.49	8.34	8.37	8.28	10.36	9.83																									
28.20	LUX	D3128H14	43.25	5.39	4.07	3.63	3.52	3.46	3.34	3.29	3.18	3.12	3.03	3.05	8.52	9.35																									
28.20	LUX	D3128H14	48.08	11.35	7.49	4.19	4.13	4.12	4.06	4.05	3.99	3.98	3.93	3.95	7.27	12.91																									
28.20	LUX	D3128H14	48.13	16.22	10.27	4.97	4.97	4.95	4.94	4.92	4.91	4.89	4.88	4.88	7.15	13.82																									
28.20	LUX	D3128H14	50.50	30.50	6.84	5.79	5.70	5.60	5.51	5.43	5.34	5.25	5.19	5.19	8.42	8.08																									
28.20	LUX	D3128H14	51.70	-9.52	9.90	9.34	9.46	9.19	9.30	9.04	9.15	8.90	9.02	8.84	11.45	10.84																									
28.20	LUX	D3128H14	52.32	13.25	10.98	8.45	8.34	8.39	8.29	8.33	8.23	8.28	8.18	8.25	10.20	12.90																									
28.20	LUX	D3128H14	55.43	12.34	11.00	10.11	9.96	10.01	9.86	9.91	9.76	9.81	9.67	9.77	11.61	12.56																									
28.20	LUX	D3128H14	55.76	37.68	4.70	4.37	4.26	4.15	4.04	3.93	3.83	3.73	3.65	3.65	6.14	4.83																									
28.20	LUX	D3128H14	57.50	-4.25	9.54	8.70	8.85	8.58	8.73	8.47	8.61	8.35	8.51	8.31	10.53	10.60																									
28.20	LUX	D3128H14	59.56	10.45	11.22	10.49	10.59	10.36	10.46	10.24	10.33	10.12	10.22	10.07	12.12	11.85																									
28.20	LUX	D3128H14	60.20	25.00	3.79	1.47	1.40	1.34	1.27	1.22	1.15	1.10	1.04	1.05	5.31	6.72																									
28.20	LUX	D3128H14	60.25	22.17	5.55	3.82	3.74	3.68	3.60	3.54	3.46	3.40	3.34	3.35	3.35	4.93	3.29																								
28.20	LUX	D3128V1	27.50	-16.00	22.50	22.17	22.12	22.11	22.02	22.03	22.04	22.05	22.07	22.05	21.78																										
28.20	LUX	D3128V1	37.10	-8.68	7.20	-6.85	-6.80	-6.80	-6.71	-6.72	-6.73	-6.74	-6.76	-6.72	-6.42																										
28.20	LUX	D3128V1	37.36	-0.59	-13.38	-13.05	-12.99	-12.99	-12.90	-12.91	-12.92	-12.93	-12.94	-12.93	-12.64																										
28.20	LUX	D3128V1	40.25	-3.43	-6.82	-6.51	-6.45	-6.46	-6.35	-6.38	-6.38	-6.41	-6.40	-6.39	-6.03																										
28.20	LUX	D3128V1	40.85	14.27	0.73	1.00	0.91	0.95	0.87	0.84	0.78	0.77	0.80	0.84	0.76	3.21																									
28.20	LUX	D3128V1	41.36	2.18	-9.21	-8.89	-8.87	-8.84	-8.78	-8.77	-8.80	-8.79	-8.83	-8.63	-8.06																										
28.20	LUX	D3128V1	42.85	-8.55	-3.11	-2.72	-2.70	-2.68	-2.62	-2.62	-2.62	-2.65	-2.64	-2.67	-2.55	-2.12																									
28.20	LUX	D3128V1	43.25	5.39	-7.40	-7.16	-7.13	-7.13	-7.07	-7.08	-7.08	-7.09	-7.10	-7.10	-6.54	-5.21																									
28.20	LUX	D3128V1	48.08	11.35	3.27	-3.22	-3.36	-3.36	-3.50	-3.49	-3.63	-3.63	-3.62	-3.71	-3.26	4.99																									
28.20	LUX	D3128V1	48.13	16.22	-2.39	-2.42	-2.52	-2.61	-2.71	-2.79	-2.88	-2.96	-3.00	-2.94	-6.59																										
28.20	LUX	D3128V1	50.50	30.50	-1.00	-0.7																																			

Orbital Position ("E")	Admin. Symbol	Beam Identifi-cation	Test Point		EPM (dB) / Channel Number																																				
			Latitude ("N)	Longitude ("E")	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
41.00	USA	US29H51D	-24.47	24.27	11.88		11.04		11.04		11.04		11.04		11.04		11.04		11.04		11.04		11.04		10.95		11.03		11.29		11.36		11.37		11.36		11.37		11.36		
41.00	USA	US29H52D	-33.99	23.72		11.29		11.29		11.29		11.29		11.29		11.29		11.29		11.29		11.29		11.29		6.10		6.20		6.28		6.28		6.28		6.28		6.28		6.60	
41.00	USA	US29H52D	-33.71	18.76		10.57		10.57		10.57		10.57		10.57		10.57		10.57		10.58		5.37		5.47		5.54		5.54		5.54		5.54		5.54		5.54		5.86			
41.00	USA	US29H52D	-30.86	30.38		11.08		11.08		11.08		11.08		11.08		11.08		11.08		11.08		11.08		5.93		6.03		6.12		6.12		6.12		6.12		6.44					
41.00	USA	US29H52D	-26.32	17.84		10.48		10.48		10.48		10.48		10.48		10.48		10.48		10.49		5.28		5.41		5.49		5.49		5.49		5.49		5.49		5.81					
41.00	USA	US29H52D	-24.84	30.52		10.50		10.50		10.50		10.50		10.50		10.50		10.50		10.51		5.37		5.49		5.59		5.59		5.59		5.59		5.59		5.91					
41.00	USA	US29H52D	-24.47	24.27		10.49		10.49		10.49		10.49		10.49		10.49		10.49		10.49		5.33		5.45		5.54		5.54		5.54		5.54		5.54		5.87					
42.00	TUR	TKBSSEED	35.00	25.00		6.16		6.16		6.16		6.16		6.16		6.16		6.16		6.18		4.99		-0.02		-0.05		-0.08		-0.05		-0.05		-0.08		1.50					
42.00	TUR	TKBSSEED	39.00	55.00		10.56		10.56		10.56		10.56		10.56		10.56		10.56		10.56		11.31		7.38		2.83		3.79		3.77		3.79		3.79		3.79					
42.00	TUR	TKBSSEED	40.50	35.00		7.62		7.62		7.62		7.62		7.62		7.62		7.62		7.82		10.27		5.16		4.20		3.64		4.20		3.64		4.20		4.46					
42.00	TUR	TKBSSEED	41.00	21.20		3.71		3.71		3.71		3.71		3.71		3.71		3.71		3.92		4.05		-0.96		-1.04		-1.10		-1.04		-1.10		-1.04		0.39					
42.00	TUR	TKBSSEED	42.80	75.00		3.40		3.40		3.40		3.40		3.40		3.40		3.40		3.40		3.67		1.13		-3.76		-2.00		-2.00		-2.00		-2.00		-2.00					
42.00	TUR	TKBSSEED	46.20	48.00		6.37		6.37		6.37		6.37		6.37		6.37		6.37		6.59		8.93		4.01		3.02		2.33		3.02		2.33		3.02		2.61					
42.00	TUR	TKBSSEED	48.00	68.00		10.24		10.24		10.24		10.24		10.24		10.24		10.24		11.40		7.87		3.02		4.06		4.04		4.04		4.06		4.06		4.06					
42.00	TUR	TKBSSWSD	43.60	4.00	-4.17		-5.58		-5.58		-5.58		-5.58		-5.58		-5.58		-5.58		-5.19		-5.21		-5.21		-5.21		-5.21		-5.21		-5.21		-5.21						
42.00	TUR	TKBSSWSD	43.73	7.42	-3.68		-5.13		-5.13		-5.13		-5.13		-5.13		-5.13		-5.13		-4.66		-4.64		-4.63		-4.63		-4.63		-4.63		-4.63		-4.63						
42.00	TUR	TKBSSWSD	46.00	22.50	-0.75	2.46		2.46		2.46		2.46		2.46		2.46		2.46		0.36		2.44		2.19		1.86		2.05		1.86		2.05		1.86							
42.00	TUR	TKBSSWSD	48.30	0.60	-3.28	-4.97		-4.97		-4.97		-4.97		-4.97		-4.97		-4.97		-4.97		-4.68		-4.54		-4.54		-4.54		-4.54		-4.54		-4.54							
42.00	TUR	TKBSSWSD	49.80	0.60	-3.50	-5.43		-5.43		-5.43		-5.43		-5.43		-5.43		-5.43		-5.43		-4.99		-4.63		-4.63		-4.63		-4.63		-4.63		-4.63							
42.00	TUR	TKBSSWSD	50.00	21.00	-2.29	-3.70		-3.70		-3.70		-3.70		-3.70		-3.70		-3.70		0.60		3.24		2.88		2.69		2.43		2.69		2.43		2.43							
42.00	TUR	TKBSSWSD	52.50	1.10	-3.53	-5.79		-5.79		-5.79		-5.79		-5.79		-5.79		-5.79		-5.11		-4.41		-4.41		-4.41		-4.41		-4.41		-4.41									
42.00	TUR	TKBSSWSD	53.00	19.00	-4.44	-5.15		-5.15		-5.15		-5.15		-5.15		-5.15		-5.15		0.85		2.96		2.58		2.12		2.38		2.12		2.38		2.12							
45.00	D	ESTR1-DH	9.30	47.00		3.64		3.64		3.64		3.64		3.64		3.64		3.64		3.64		3.87		1.48		1.50		1.52		1.52		1.52		1.52							
45.00	D	ESTR1-DH	10.20	25.90		8.53		8.53		8.53		8.53		8.53		8.53		8.53		8.53		9.37		16.47		17.08		17.50		17.46		17.50		17.89							
45.00	D	ESTR1-DH	21.00	51.40		7.92		7.93		7.93		7.93		7.93		7.93		7.93		7.93		6.95		4.16		4.21		4.79		4.79		4.79		6.00							
45.00	D	ESTR1-DH	23.00	-15.50		10.49		10.49		10.49		10.49		10.49		10.49		10.49		10.49		12.35		15.18		16.46		16.72		16.68		16.72		16.68							
45.00	D	ESTR1-DH	37.40	38.00		-10.91		-10.91		-10.91		-10.91		-10.91		-10.91		-10.91		-10.91		10.64		-0.34		4.15		3.54		3.10		3.54		3.24							
45.00	D	ESTR1-DH	39.30	26.50		9.49		9.49		9.49		9.49		9.49		9.49		9.49		9.49		9.27		0.74		4.77		4.49		4.26		4.49		4.75							
45.00	D	ESTR1-DH	42.00	-9.00		6.23		6.23		6.23		6.23		6.23		6.23		6.23		6.23		7.87		14.88		15.79		16.04		16.04		16.04		16.83							
45.00	D	ESTR1-DH	52.30	5.90		-7.76		-7.76		-7.76		-7.76		-7.76		-7.76		-7.76		-7.76		-7.41		-6.69		-6.68		-6.68		-6.68		-6.68		-4.89							
45.00	D	ESTR1-DH	54.10	-2.40		4.30		4.30		4.30		4.30		4.30		4.30		4.30		4.30		3.77		-2.23		-2.21		-2.21		-2.21		-2.21		-0.52							
45.00	D	ESTR1-DH	55.20	-6.20		-3.77		-3.77		-3.77		-3.77		-3.77		-3.77		-3.77		-3.00		-0.86		-0.81		-0.82		-0.81		-0.81		-0.81									
45.00	D	ESTR1-DV	9.30	47.00		5.17		5.18		5.18		5.18		5.18		5.18		5.18		5.18		4.94		3.83		3.88		3.88		3.88		3.88									
45.00	D	ESTR1-DV	10.20	25.90		8.56		8.56		8.56		8.56		8.56		8.56		8.56		8.56		14.67		18.63		19.53		19.63		19.70		19.63									
45.00	D	ESTR1-DV	21.00	51.40		7.31		7.31		7.31		7.31		7.31		7.31		7.31		7.31		4.27		3.85		4.06		4.20		4.20		4.20									
45.00	D	ESTR1-DV	23.00	-15.50		9.21		8.93		8.93		8.93		8.93		8.93		8.93		8.93		16.41		16.75		18.12		18.15		18.21		18.15									
45.00	D	ESTR1-DV	37.40	38.00		-7.57		-9.48		-9.48		-9.48		-9.48		-9.48		-9.48		-9.48		-7.04		-4.04		-1.10		-1.30		-1.14		-1.14									
45.00	D	ESTR1-DV	39.30	26.50		-5.87		-7.90		-7.90		-7.90		-7.90		-7.90		-7.90		-7.90		-5.62		-2.47		0.48		0.36		0.45		0.36									
45.00	D	ESTR1-DV	42.00	-9.00		5.06		5.06		5.06		5.06		5.06		5.06		5.06		5.06		14.05		16.43		17.57		17.62		17.66		17.62									
45.00	D	ESTR1-DV	52.30	5.90	</																																				

ATTACHMENT 5

**Provisional Reference Situation for the Regions 1 and 3 Feeder-link Lists of additional uses
(17.3 - 18.1 GHz and 14.5 - 14.8 GHz frequency bands)**

Notes to Table 4:

1. Table 4 provides the complete provisional reference situation Equivalent Protection Margins (EPMs) of the Resolution 542 (WRC-2000) Regions 1 and 3 feeder-link Lists of additional uses (i.e. for all test-points).
2. Characteristics of each of the beams are given in the table contained in Part II of Annex 2 to Resolution 542 (WRC-2000).

Table 4 to Attachment 5

**Equivalent Protection Margin (EPM) of Assignments in the Regions 1 and 3 Feeder-link List
in the frequency band 14.5-14.8 GHz
(sorted by orbital position)**

Equivalent Protection Margin (EPM) of Assignments in the Regions 1 and 3 Feeder-link List in the frequency band 17.3-18.1 GHz (sorted by orbital position)

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																												
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40					
-13.00	S	SIRIUSW1	55.30	13.30			0.27			0.27			0.28			0.27			0.17																														
-13.00	S	SIRIUSW1	57.40	19.00			-0.88			-0.88			-0.88			-0.88			-0.98																														
-13.00	S	SIRIUSW1	58.50	11.00			0.42			0.42			0.42			0.42			0.32																														
-13.00	S	SIRIUSW1	63.30	12.00			-0.36			-0.36			-0.36			-0.36			-0.46																														
-13.00	S	SIRIUSW1	63.50	20.80			0.04			0.04			0.04			0.04			-0.06																														
-13.00	S	SIRIUSW1	69.10	20.10			-1.56			-1.56			-1.56			-1.56			-1.66																														
-7.00	EGY	D33NI1S1	11.00	50.10		11.40		11.40		11.40		11.40		12.33		13.41		13.41																															
-7.00	EGY	D33NI1S1	18.90	10.60		12.67		12.67		12.67		12.67		13.60		14.68		14.68																															
-7.00	EGY	D33NI1S1	19.60	30.60		13.88		13.89		13.88		13.88		14.81		15.90		15.89																															
-7.00	EGY	D33NI1S1	22.00	55.60		12.93		12.93		12.93		12.93		12.93		13.86		14.94		14.94																													
-7.00	EGY	D33NI1S1	27.60	-5.80		14.39		14.39		14.39		14.39		15.32		16.40		16.40																															
-7.00	EGY	D33NI1S1	29.96	31.00		13.98		13.99		13.98		13.99		14.91		16.00		15.99																															
-7.00	EGY	D33NI1S1	30.05	31.25		13.99		13.99		13.99		13.99		14.92		16.01		16.00																															
-7.00	EGY	D33NI1S1	31.32	30.06		14.15		14.15		14.15		14.15		15.08		16.16		16.16																															
-7.00	EGY	D33NI1S1	31.40	37.60		14.08		14.09		14.08		14.09		15.01		16.10		16.09																															
-7.00	EGY	D33NI1S1	36.50	43.40		12.70		12.70		12.70		12.70		13.63		14.71		14.71																															
-7.00	EGY	D33NI1S2	11.00	50.10		11.10		11.93		11.10		11.93		11.10		14.86		13.23																															
-7.00	EGY	D33NI1S2	18.90	10.60		12.37		13.21		12.37		13.21		12.37		12.37		16.13		14.51																													
-7.00	EGY	D33NI1S2	19.60	30.60		13.08		13.91		13.08		13.91		13.08		13.91		13.08		16.84		15.21																											
-7.00	EGY	D33NI1S2	22.00	55.60		12.59		13.42		12.59		13.42		12.59		13.42		12.59		16.35		14.72																											
-7.00	EGY	D33NI1S2	27.60	-5.80		14.00		14.84		14.00		14.84		14.00		14.84		14.00		17.76		16.14																											
-7.00	EGY	D33NI1S2	29.96	31.00		13.35		14.19		13.35		14.19		13.35		14.19		13.35		17.11		15.49																											
-7.00	EGY	D33NI1S2	30.05	31.25		13.33		14.17		13.33		14.17		13.33		14.17		13.33		17.09		15.47																											
-7.00	EGY	D33NI1S2	31.32	30.06		13.09		13.92		13.09		13.92		13.09		13.92		13.09		16.85		15.22																											
-7.00	EGY	D33NI1S2	31.40	37.60		12.90		13.74		12.90		13.74		12.90		13.74		12.90		16.66		15.03																											
-7.00	EGY	D33NI1S2	36.50	43.40		11.98		12.81		11.98		12.81		11.98		12.81		11.98		15.74		14.11																											
-7.00	F	F5_27D16	48.20	3.88																																													
-7.00	F	F5_27D17	48.20	3.88		17.92																																											
-7.00	F	F5_27D18	48.20	3.88																																													
-7.00	F	F5_27D19	48.20	3.88																																													
-7.00	F	F5_27D20	48.20	3.88																																													
-7.00	F	F5_33D16	48.20	3.88																																													
-7.00	F	F5_33D17	48.20	3.88		17.70																																											
-7.00	F	F5_33D18	48.20	3.88																																													
-7.00	F	F5_33D19	48.20	3.88																																													
-7.00	F	F5_33D20	48.20	3.88																																													
-7.00	F	F93D2751	41.20	9.50	-2.64																																												
-7.00	F	F93D2751	42.50	3.00	9.61																																												
-7.00	F	F93D2751	43.30	-1.90	3.27																																												
-7.00	F	F93D2751	48.20	3.88	20.75																																												
-7.00	F	F93D2751	48.50	-4.50	-0.63																																												
-7.00	F	F93D2751	49.10	8.10	14.18																																												
-7.00	F	F93D2751	51.20	2.50	15.93																																												
-7.00	F	F93D2753	41.20	9.50		-1.90																																											
-7.00	F	F93D2753	42.50	3.00	10.35																																												
-7.00	F	F93D2753	43.30	-1.90	4.02																																												
-7.00	F	F93D2753	48																																														

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																											
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
5.00	S	S13902	70.70	23.60																																						7.69						
5.00	S	SI2UNA	49.60	22.20																																					-14.24							
5.00	S	SI2UNA	55.00	8.50																																				4.98								
5.00	S	SI2UNA	59.00	5.70																																				3.90								
5.00	S	SI2UNA	60.00	30.50																																				3.28								
5.00	S	SI2UNA	61.50	5.00																																				3.23								
5.00	S	SI2UNA	65.80	24.00																																				6.51								
5.00	S	SI2UNAA	49.60	22.20																																												
5.00	S	SI2UNAA	55.00	8.50																																												
5.00	S	SI2UNAA	59.00	5.70																																												
5.00	S	SI2UNAA	60.00	30.50																																												
5.00	S	SI2UNAA	61.50	5.00																																												
5.00	S	SI2UNAA	65.80	24.00																																												
5.00	S	SI2UNAS	40.50	-3.50																																												
5.00	S	SI2UNAS	41.00	-8.30																																												
5.00	S	SI2UNAS	43.60	-6.00																																												
5.00	S	SI2UNAS	46.00	2.20																																												
5.00	S	SI2UNAS	48.00	-3.50																																												
5.00	S	SI2UNAS	49.10	26.30																																												
5.00	S	SI2UNAS	49.50	6.00																																												
5.00	S	SI2UNAS	50.00	20.00																																												
5.00	S	SI2UNAS	50.20	12.00																																												
5.00	S	SI2UNAS	55.30	23.20																																												
5.00	S	SI2UND	49.60	22.20																																												
5.00	S	SI2UND	55.00	8.50																																												
5.00	S	SI2UND	59.00	5.70																																												
5.00	S	SI2UND	60.00	30.50																																												
5.00	S	SI2UND	61.50	5.00																																												
5.00	S	SI2UND	65.80	24.00																																												
5.00	S	SI2UNDA	49.60	22.20																																												
5.00	S	SI2UNDA	55.00	8.50																																												
5.00	S	SI2UNDA	59.00	5.70																																												
5.00	S	SI2UNDA	60.00	30.50																																												
5.00	S	SI2UNDA	61.50	5.00																																												
5.00	S	SI2UNDA	65.80	24.00																																												
5.00	S	SI2UNDS	40.50	-3.50																																												
5.00	S	SI2UNDS	41.00	-8.30																																												
5.00	S	SI2UNDS	43.60	-6.00																																												
5.00	S	SI2UNDS	46.00	2.20																																												
5.00	S	SI2UNDS	48.00	-3.50																																												
5.00	S	SI2UNDS	49.10	26.30																																												
5.00	S	SI2UNDS	49.50	6.00																																												
5.00	S	SI2UNDS	50.00	20.00																																												
5.00	S	SI2UNDS	50.20	12.00																																												
5.00	S	SI2UNDS	55.30	23.20																																												
5.20	S	SI3NHA	49.60	22.20																																												
5.20	S	SI3NHA	55.00	8.50																																												
5.20	S	SI3NHA	59.00	5.70																																												
5.20	S	SI3NHA	60.00	30.50																																												
5.20	S	SI3NHA	61.50	5.00																																												
5.20	S	SI3NHA	65.80	24.00																																												
5.20	S	SI3NHD	49.60	22.20																																												

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																								
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
28.20	LUX	D3328V21	37.10	-8.68	0.07	-2.51	-2.58	-2.56	-2.65	-2.61	-2.61	-2.70	-2.69	-2.73	-2.73	-2.76																													
28.20	LUX	D3328V21	37.36	-0.59	1.22	-1.36	-1.43	-1.41	-1.50	-1.46	-1.55	-1.54	-1.54	-1.58	-1.61																														
28.20	LUX	D3328V21	40.25	-3.43	2.67	0.09	0.02	0.04	-0.05	-0.01	-0.10	-0.10	-0.10	-0.13	-0.13	-0.16																													
28.20	LUX	D3328V21	40.85	14.27	1.86	-0.72	-0.79	-0.77	-0.85	-0.81	-0.91	-0.90	-0.90	-0.94	-0.94	-0.96																													
28.20	LUX	D3328V21	41.36	2.18	1.58	-1.00	-1.07	-1.05	-1.14	-1.10	-1.19	-1.18	-1.18	-1.22	-1.22	-1.25																													
28.20	LUX	D3328V21	42.85	-8.55	-1.20	-3.78	-3.85	-3.83	-3.92	-3.88	-3.97	-3.97	-4.00	-4.03	-4.04	-4.06																													
28.20	LUX	D3328V21	43.25	5.39	1.79	-0.80	-0.87	-0.85	-0.93	-0.89	-0.98	-0.98	-0.98	-1.01	-1.01	-1.04																													
28.20	LUX	D3328V21	48.08	11.35	2.21	-0.37	-0.44	-0.42	-0.51	-0.47	-0.56	-0.55	-0.55	-0.59	-0.62																														
28.20	LUX	D3328V21	48.13	16.22	2.34	-0.24	-0.31	-0.29	-0.38	-0.34	-0.43	-0.42	-0.42	-0.46	-0.46	-0.49																													
28.20	LUX	D3328V21	50.50	30.50	-1.95	-4.54	-4.61	-4.59	-4.67	-4.63	-4.72	-4.72	-4.75	-4.78																															
28.20	LUX	D3328V21	51.70	-9.52	-1.35	-3.93	-4.00	-3.98	-4.07	-4.03	-4.12	-4.11	-4.15	-4.18																															
28.20	LUX	D3328V21	52.32	13.25	2.33	-0.25	-0.32	-0.30	-0.39	-0.35	-0.44	-0.43	-0.47	-0.50																															
28.20	LUX	D3328V21	55.43	12.34	1.82	-0.76	-0.83	-0.81	-0.90	-0.86	-0.95	-0.94	-0.98	-1.01																															
28.20	LUX	D3328V21	55.76	37.68	-5.30	-7.88	-7.95	-7.93	-8.01	-7.97	-8.06	-8.06	-8.10	-8.12																															
28.20	LUX	D3328V21	57.50	-4.25	-0.89	-3.47	-3.54	-3.52	-3.61	-3.57	-3.66	-3.65	-3.69	-3.72																															
28.20	LUX	D3328V21	59.56	10.45	1.01	-1.58	-1.65	-1.63	-1.71	-1.67	-1.76	-1.76	-1.79	-1.82																															
28.20	LUX	D3328V21	60.20	25.00	0.75	-1.83	-1.90	-1.88	-1.96	-1.92	-2.02	-2.01	-2.05	-2.07																															
28.20	LUX	D3328V21	60.25	5.20	0.60	-1.98	-2.05	-2.03	-2.12	-2.08	-2.17	-2.16	-2.20	-2.23																															
28.20	LUX	D3328V21	65.60	22.17	-2.33	-4.91	-4.98	-4.96	-5.04	-5.00	-5.09	-5.09	-5.13	-5.15																															
28.20	LUX	D3328V22	40.25	-3.43																																									
28.20	LUX	D3328V22	52.00	10.00																																									
28.20	LUX	D3328V51	27.50	-16.00	-1.13	-3.71	-3.78	-3.76	-3.84	-3.81	-3.90	-3.89	-3.93	-3.95																															
28.20	LUX	D3328V51	37.10	-8.68	6.07	3.49	3.42	3.44	3.35	3.39	3.30	3.31	3.27	3.24																															
28.20	LUX	D3328V51	37.36	-0.59	7.22	4.64	4.57	4.59	4.50	4.54	4.45	4.46	4.42	4.39																															
28.20	LUX	D3328V51	40.25	-3.43	8.67	6.09	6.02	6.04	5.95	5.99	5.90	5.90	5.87	5.84																															
28.20	LUX	D3328V51	40.85	14.27	7.86	5.28	5.21	5.23	5.15	5.18	5.09	5.10	5.06	5.04																															
28.20	LUX	D3328V51	41.36	2.18	7.58	5.00	4.93	4.95	4.86	4.90	4.81	4.82	4.78	4.75																															
28.20	LUX	D3328V51	42.85	-8.55	4.80	2.22	2.15	2.17	2.08	2.12	2.03	2.03	2.00	1.97																															
28.20	LUX	D3328V51	43.25	5.39	7.79	5.20	5.13	5.15	5.07	5.11	5.02	5.02	4.99	4.96																															
28.20	LUX	D3328V51	48.08	11.35	8.21	5.63	5.56	5.58	5.49	5.53	5.44	5.45	5.41	5.38																															
28.20	LUX	D3328V51	48.13	16.22	8.34	5.76	5.69	5.71	5.62	5.66	5.57	5.58	5.54	5.51																															
28.20	LUX	D3328V51	50.50	30.50	4.05	1.46	1.39	1.41	1.33	1.37	1.28	1.28	1.25	1.22																															
28.20	LUX	D3328V51	51.70	-9.52	4.65	2.07	2.00	2.02	1.93	1.97	1.88	1.89	1.85	1.82																															
28.20	LUX	D3328V51	52.32	13.25	8.33	5.75	5.68	5.70	5.61	5.65	5.56	5.57	5.53	5.50																															
28.20	LUX	D3328V51	55.43	12.34	7.82	5.24	5.17	5.19	5.10	5.14	5.05	5.06	5.02	4.99																															
28.20	LUX	D3328V51	55.76	37.68	0.70	-1.88	-1.95	-1.93	-2.01	-1.97	-2.07	-2.06	-2.10	-2.12																															
28.20	LUX	D3328V51	57.50	-4.25	5.11	2.53	2.46	2.48	2.39	2.43	2.34	2.35	2.31	2.28																															
28.20	LUX	D3328V51	59.56	10.45	7.01	4.42	4.35	4.37	4.29	4.33	4.24	4.24	4.21	4.18																															
28.20	LUX	D3328V51	60.20	25.00	6.75	4.17	4.10	4.12	4.04	4.08	3.98	3.99	3.95	3.93																															
28.20	LUX	D3328V51	60.25	5.20	6.60	4.02	3.95	3.97	3.88	3.92	3.83	3.84	3.80	3.77																															
28.20	LUX	D3328V51	65.60	22.17	3.67	1.09	1.02	1.04	0.96	1.00	0.91	0.91	0.87	0.85																															
28.20	LUX	D3328V52	40.25	-3.43																																									
28.20	LUX	D3328V52	52.00	10.00																																									
36.00	F	E3FA3EL1	35.33	25.13	0.53	-1.60	-0.60	-1.60	-0.60	-1.60	-0.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60						
36.00	F	E3FA3EL1	39.64	32.81	-1.33																																								

Orbital Position (°E)	Admin. Symbol	Beam Identification	Test Point		EPM (dB) / Channel Number																																							
			Latitude (°N)	Longitude (°E)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
116.00	LAO	LST3NO2D	35.30	129.00																				-9.14	-9.14																			
116.00	LAO	LST3NO2D	37.97	126.50																				-7.60	-7.60																			
116.00	LAO	LST3NO2D	39.55	116.26																				-9.18	-9.18																			
116.00	LAO	LST3NOLD	23.39	120.50	-9.23	-7.71	-7.71	-7.71	-7.71	-7.71	-7.71	-7.71	-8.81	-10.51	-7.70	-7.70																												
116.00	LAO	LST3NOLD	24.00	114.00	-6.49	-4.96	-4.96	-4.96	-4.96	-4.96	-4.96	-4.96	-6.06	-7.76	-4.96	-4.96																												
116.00	LAO	LST3NOLD	30.26	110.60	-17.97	-16.44	-16.44	-16.44	-16.44	-16.44	-16.44	-16.44	-17.54	-19.24	-16.44	-16.44																												
116.00	LAO	LST3NOLD	31.06	121.22	-8.59	-7.07	-7.07	-7.07	-7.07	-7.07	-7.07	-7.07	-8.17	-9.87	-7.06	-7.06																												
116.00	LAO	LST3NOLD	35.30	129.00	-10.69	-9.17	-9.17	-9.17	-9.17	-9.17	-9.17	-9.17	-10.27	-11.97	-9.16	-9.16																												
116.00	LAO	LST3NOLD	37.97	126.50	-9.16	-7.63	-7.63	-7.63	-7.63	-7.63	-7.63	-7.63	-8.73	-10.43	-7.62	-7.62																												
116.00	LAO	LST3NOLD	39.55	116.26	-10.73	-9.21	-9.21	-9.21	-9.21	-9.21	-9.21	-9.21	-10.31	-12.01	-9.20	-9.20																												
116.00	LAO	LST3WE2D	8.74	80.48																				-4.43	-4.43	-4.21																		
116.00	LAO	LST3WE2D	11.70	78.00																				1.63	1.63	1.84																		
116.00	LAO	LST3WE2D	14.98	79.90																				-1.78	-1.78	-1.57																		
116.00	LAO	LST3WE2D	20.00	78.00																				-1.85	-1.85	-1.63																		
116.00	LAO	LST3WE2D	20.45	72.85																				-1.94	-1.94	-1.72																		
116.00	LAO	LST3WE2D	22.24	89.31																				-6.50	-6.50	-6.29																		
116.00	LAO	LST3WE2D	25.82	87.51																				-2.81	-2.80	-2.59																		
116.00	LAO	LST3WE2D	27.02	86.62																				-6.48	-6.48	-6.27																		
116.00	LAO	LST3WE2D	28.30	73.86																				-3.04	-3.04	-2.82																		
116.00	LAO	LST3WE2D	28.71	81.97																				-5.51	-5.50	-5.29																		
116.00	LAO	LST3WE2D	34.00	78.00																				-3.07	-3.07	-2.86																		
116.00	LAO	LST3WE2D	35.67	74.63																				-12.61	-12.61	-12.40																		
116.00	LAO	LST3WELD	8.74	80.48	-5.06	-5.33	-5.33	-5.33	-5.33	-5.33	-5.33	-5.33	-5.32	-4.88	-4.89	-5.33																												
116.00	LAO	LST3WELD	11.70	78.00	0.99	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.74	1.18	1.17	0.73																												
116.00	LAO	LST3WELD	14.98	79.90	-2.42	-2.68	-2.68	-2.68	-2.68	-2.68	-2.68	-2.68	-2.67	-2.23	-2.24	-2.68																												
116.00	LAO	LST3WELD	20.00	78.00	-2.48	-2.75	-2.75	-2.75	-2.75	-2.75	-2.75	-2.75	-2.75	-2.73	-2.29	-2.31	-2.75																											
116.00	LAO	LST3WELD	20.45	72.85	-2.58	-2.84	-2.84	-2.84	-2.84	-2.84	-2.84	-2.84	-2.83	-2.39	-2.40	-2.84																												
116.00	LAO	LST3WELD	22.24	89.31	-7.14	-7.40	-7.40	-7.40	-7.40	-7.40	-7.40	-7.39	-6.95	-6.96	-7.40																													
116.00	LAO	LST3WELD	25.82	87.51	-3.44	-3.71	-3.71	-3.71	-3.71	-3.71	-3.71	-3.71	-3.69	-3.25	-3.27	-3.71																												
116.00	LAO	LST3WELD	25.91	67.89	-7.12	-7.38	-7.38	-7.38	-7.38	-7.38	-7.38	-7.38	-7.37	-6.93	-6.94	-7.38																												
116.00	LAO	LST3WELD	27.02	86.62	-3.67	-3.94	-3.94	-3.94	-3.94	-3.94	-3.94	-3.94	-3.93	-3.49	-3.50	-3.94																												
116.00	LAO	LST3WELD	28.30	73.86	-6.14	-6.40	-6.40	-6.40	-6.40	-6.40	-6.40	-6.40	-6.39	-5.95	-5.97	-6.40																												
116.00	LAO	LST3WELD	28.71	81.97	-3.71	-3.97	-3.97	-3.97	-3.97	-3.97	-3.97	-3.97	-3.96	-3.52	-3.53	-3.97																												
116.00	LAO	LST3WELD	34.00	78.00	-13.25	-13.51	-13.51	-13.51	-13.51	-13.51	-13.51	-13.50	-13.06	-13.07	-13.51																													
116.00	LAO	LST3WELD	35.67	74.63	-15.61	-15.87	-15.87	-15.87	-15.87	-15.87	-15.87	-15.86	-15.42	-15.44	-15.87																													
116.00	LAO	LST3WO2D	8.74	80.48																				-4.43	-4.43																			
116.00	LAO	LST3WO2D	11.70	78.00																				1.63	1.63																			
116.00	LAO	LST3WO2D	14.98	79.90																				-1.78	-1.78																			
116.00	LAO	LST3WO2D	20.00	78.00																				-1.84	-1.84																			
116.00	LAO	LST3WO2D	20.45	72.85																				-1.94	-1.94																			
116.00	LAO	LST3WO2D	22.24	89.31																				-6.50	-6.50																			
116.00	LAO	LST3WO2D	25.82	87.51																				-2.80	-2.80																			
116.00	LAO	LST3WO2D	25.91	67.89																				-6.48	-6.48																			
116.00	LAO	LST3WO2D	27.02	86.62																				-3.04	-3.04																			
116.00	LAO	LST3WO2D	28.30	73.86																				-3.07	-3.07																			
116.00	LAO	LST3WO2D	28.71	8																																								

